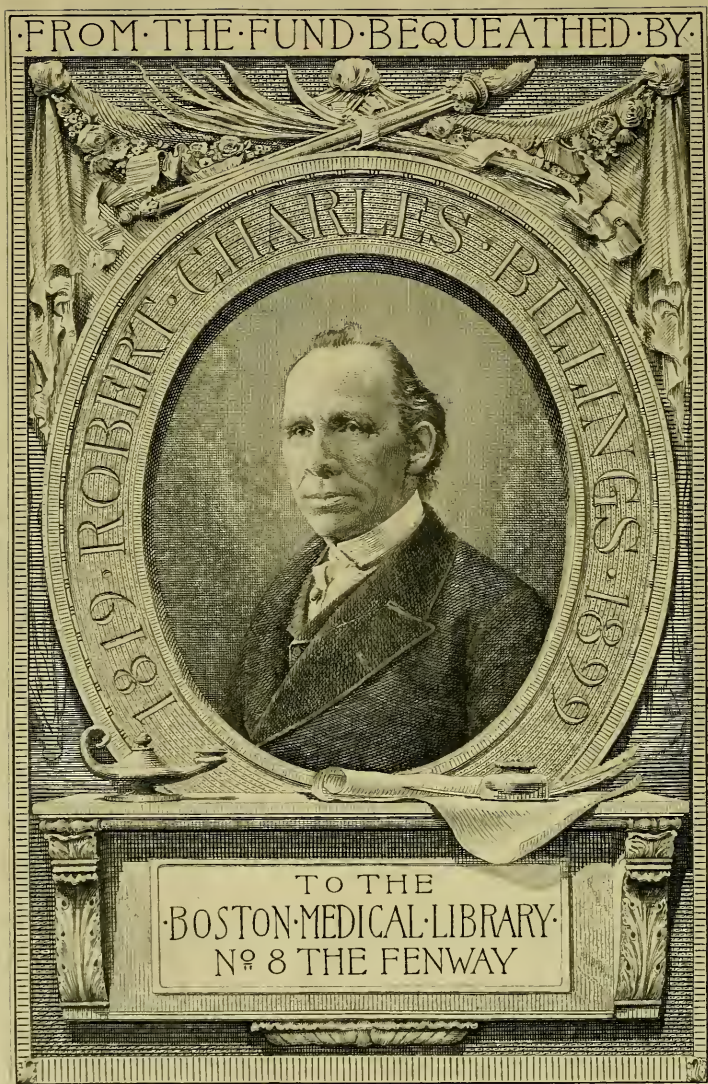


LIFE
OF
LOUISE LATEAU



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LOUISE LATEAU OF BOIS D'HAINÉ,

HER LIFE, HER ECSTASIES, AND HER STIGMATA.

A Medical Study

BY



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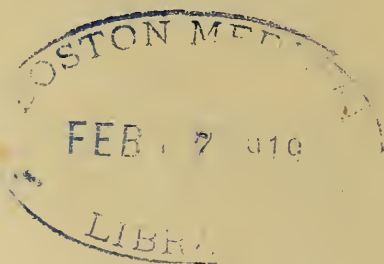
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PREFACE.

THE author of this work is one of the most eminent physicians in Belgium. He is Professor of General Pathology and Therapeutics in the Catholic University of Louvain; for nearly twenty years he has been at the head of the medical staff of two establishments for the cure of mental diseases, during which period he has also delivered courses of lectures upon the same subject; and he has as extensive a private practice as it is possible for any one man to attend to. Those who have the privilege of his private acquaintance speak in the highest terms both of his moral and intellectual qualities; his keenness of observation, sound sense, and perfect integrity. In a word, no quality seems to be wanting to him which the most fastidious of critics could desire in a witness on so delicate and important an investigation as that which is recorded in the following pages.

In the course of the work, Dr. Lefebvre makes many apologies for seeming to trespass on the domain of theology; and, by parity of reasoning, I too am bound to apologise for editing a treatise which is essentially medical. Perhaps a sufficient apology for us both is to be found in the truth which the author insists upon at the very outset of his treatise and which he has frequent occasion to repeat, viz.

that the extraordinary facts which are to be studied in the case of Louise Lateau stand upon the confines of the moral and physical orders, so that it is impossible peremptorily to divide them into two absolutely distinct parts. Priests and doctors are equally interested in them, and they cannot be adequately appreciated without the help of both. To this I may be allowed to add other personal reasons which have led me to edit a work that may seem at first sight somewhat foreign to my profession. It was through the kind intervention of Dr. Lefebvre that I had the opportunity of witnessing the phenomena of stigmatisation and of ecstasy in Louise Lateau on January 5, 1872. His request therefore that I would superintend a translation of his book had a claim upon me. Moreover, in the spring of the same year, I was present (by invitation) at a debate in a club of University Graduates, consisting chiefly of doctors and clergymen, in which these phenomena were discussed; and a complete answer to every question that was raised in the discussion is to be found in this book.

The discussion was opened by an able paper, written by one who had had considerable experience in the treatment of mental diseases. This gentleman frankly accepted all the extraordinary phenomena of the case, as stated by Dr. Lefebvre; he expressed also his complete belief in the honesty and good faith of the girl herself and of those about her, nevertheless he urged that the case in no way stood outside the science of pathology. He represented Louise Lateau as, in body, of a very weak constitution, reduced by indigence and previous illness to an extraordinary poverty of blood; and, in mind, as a devotee, continually rapt in contemplation of 'those sensible manifestations of our Lord's sufferings so common in Catholic countries.' Under these conditions, he did not consider it very wonderful that

she should become the victim of a disease, partly mental and partly bodily, which produced certain phenomena, rare indeed, yet not unexampled. Finally, he argued that if each of the phenomena, taken alone, was not unknown to medical science, their combination could not remove them into a different category, and give them a title to be accounted supernatural. In a word, he would explain the whole case by the merely natural influence of mind upon matter, and in support of this view, he told a remarkable story, which he considered to be established by sufficient evidence, of a lady who once suffered a serious injury from merely *seeing* a boy in whom she was interested open a heavy iron door and then let it fall again in such a way that she thought it must inevitably crush his ankle. ‘It was impossible,’ the lady said,—‘a highly intelligent lady, well known’ to the medical gentleman who has recorded the case,—‘it was impossible by word or act to be quick enough to meet the supposed emergency; and, in fact, I could not move, for such intense pain came on in my ankle, corresponding to the one I thought the boy would have injured, that I could only put my hand on it to lessen its extreme painfulness. The walk home (about a quarter of a mile) was very laborious, and in taking off my stocking, I found a circle round the ankle, as if it had been painted with red-currant juice, with a large spot of the same on the outer part. By morning, the whole foot was inflamed, and I was a prisoner in my bed for many days.’¹ The lecturer went on to say that though we cannot tell how nature acted in this case, yet nobody dreams of calling it supernatural, because nothing supernatural enters into it. Why, then, should we assign a different cause for precisely similar

¹ *Illustrations of the Influence of the Mind upon the Body in Health and Disease.* By D. H. Tuke, M.D. London, 1872. p. 260.

effects, merely because these happen to be connected with emotions of a religious character? Religion is confessedly one of the most powerful motives which can influence the human mind: we ought not therefore to be surprised if religious persons, morbidly affected in body and of exceptionally sensitive and impressible natures, sometimes exhibit physiological phenomena of a very remarkable kind, bearing a certain resemblance to the facts or doctrines of the religion which they profess.

I have given this brief sketch of an interesting lecture, because I wish the theory which it advocates to be present to the reader's mind, whilst he enters upon the study of the following pages; and that it may impress him the more, I will add one or two more cases of a somewhat similar character which are recorded in the same book. It is stated, for example, of a young married lady, that 'her lips and mouth became suddenly enormously swollen, from having seen a child of a few years old pass the sharp blade of a knife between its lips without even cutting itself; which intumescence it required the usual applications to subdue; it had an appearance similar to that produced by the sting of a wasp or some other venomous insect, which there was no possibility of having occurred.'² Again, 'fear during sleep is said to have caused local inflammation corresponding with the image present in the mind in a dream. A man, aged thirty, dreamed that a Pole threw a stone at his breast. The vivid shock awoke him, and he found that there was precisely on that spot a round mark having the appearance of a bruise. Next day there was so much swelling that a surgeon was requested to see it, who, fearing a slough, scarified the part and relieved it. The wound

² *Illustrations of the Influence of the Mind upon the Body in Health and Disease.* By D. H. Tuke, M.D. London, 1872. p. 262.

healed in a short time.’³ And yet, once more, we are told that ‘a lady of an exceedingly sensitive and impressible nature, on one occasion, when a gentleman visited her house, experienced a very uncomfortable sensation so long as he was present, and observed a spot or sore in his cheek. Two days after, a similar spot or sore appeared on her own cheek, in precisely the same situation and with the same characters.’⁴

From facts of this kind it may be fairly concluded that under the power of the imagination, and by the concentration of the attention, a certain direction can be imposed upon the circulation of the blood; the local afflux to any part of the body can be augmented by the mere circumstance of thinking of that part, and it is even said that this ‘increased vascularity frequently causes extravasation or rupture of small blood-vessels.’ Dr. Tuke, however, makes an important qualification of this statement by adding, ‘in persons under the influence of emotion, and chiefly when sudden;’ or, as he expresses himself elsewhere, ‘this effect is greatly intensified, if accompanied by a powerful emotion,’ and ‘whether the effect be slight or considerable must depend upon the force of the impulse conveyed from the brain and the sensibility of the individual’s system.’

The careful reader cannot fail to have observed that in all the cases I have cited, this circumstance of a strong and sudden emotion has not been wanting; but in the subject of the present history he will find no trace of this. Dr. Lefebvre adduces testimony which is decisive upon this point; he also insists upon certain other essential differences between the phenomena which are here described

³ *Illustrations of the Influence of the Mind upon the Body in Health and Disease.* By D. H. Tuke, M.D. London, 1872. p. 261.

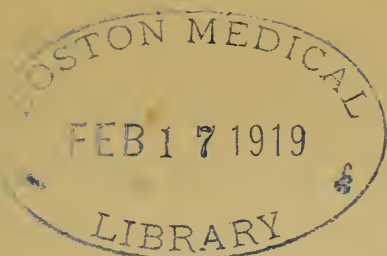
⁴ *Ibid.* p. 423.

and those that are recorded in medical books. Upon some of these, perhaps, only medical men are competent judges. It must not be supposed, however, that this work is written only, or even mainly, for professional men. On the contrary, it is addressed to all men of intelligence and education; and for the benefit of those who have no medical knowledge, the author has taken pains to explain whatever technical terms it was necessary to use. With the help of these explanations, there are but few portions of this treatise which will be unintelligible, or uninteresting, to ordinary laymen, though some portions will doubtless be less interesting than others, especially perhaps the part between pages 100 and 125.

It only remains to add that I am indebted to my friend, Dr. Mackey, of Birmingham, for the translation of the medical portions of the book, and to the Rev. C. J. Bowen, of Banbury, for the remainder.

J. S. N.

St. Mary's, Oscott,
Feast of the Stigmata of St. Francis of Assisi, 1873.



LOUISE LATEAU

OF BOIS D'HAINÉ.

IN the spring of 1869 a singular rumour was being spread abroad. Report said that in a village of Hainaut (Belgium) blood came every week from various parts of the body of a young girl. The most remarkable part of the story was that the blood flowed only on Fridays, and always came from the same places,—the left side of the breast, the palm and back of the hands, and from the corresponding places on each foot. A few months afterwards, it was, moreover, said that she was in an ecstasy every Friday; and that this ecstasy¹ lasted through a great part of the day.

The report of the first witnesses of these extraordinary things soon aroused the public ear. Crowds assembled each week around the humble cottage which was the scene of them. Then ecclesiastical authority took cognisance of it. Such was its right, nay, its duty. From the very outset this authority saw that divers elements of the case must pass through the crucible of science; for periodical hæmorrhage and the suspension of the exercise of the senses were phenomena which belonged to the province of medical men. I was asked to undertake the case. At the same time it was suggested that I should study simply its medical

¹ I shall use the word 'ecstasy' in this treatise, not in its theological, but in its usual medical sense.

bearings. I was, however, desired to study them deeply, and not to shrink from any test which modern science required, no matter how severe the test might be. I shall perhaps astonish many readers by speaking in this way, if they are unacquainted with the traditions of the Catholic Church. In the world a twofold prejudice prevails. Some imagine that the Church is incessantly seeking after new revelations and miracles; others think that she is too slow nowadays in affirming facts of the supernatural order to our sceptical and scoffing generation. Both parties know little of the Church. Truth is heaven-born: whenever it descends to man, whether it be amidst popular applause, or whether it be lowly and despised, the Church, its Divine guardian, always receives it, always welcomes it with affection and respect. On the other hand, she has nothing to do with apocryphal miracles or with suspicious marvels; she feels no attraction towards error. Whenever she meets with it, masked though it be under the semblance of religion, she denounces it calmly but mercilessly.

It was impossible for me with any propriety to decline the duty thus proposed to me. But I ought to add, that I was also encouraged to accept it by the consideration that the science to which I have devoted my life must undoubtedly gain by the discussion of the new problems which were thus placed before it. I need hardly say that I feel no temptation to exceed the limits which were laid down for me. A merely medical study of the facts of Bois d'Haine is all that I undertake. The question, thus limited, is still difficult; and I am quite conscious both of this difficulty and of my own insufficiency. At the same time, it is due to myself that I should add that I have too much respect for the public, to dare to enter upon the discussion of delicate problems without serious preparation.

For fifteen years I have been placed at the head of the medical staff of two establishments for the mentally afflicted. During the same period I have lectured specially on mental maladies. Therefore, by my duties as well as my tastes, I have been led to explore with some care the immense and

obscure domain of nervous affections. I have followed, for upwards of eighteen months, the phenomena which are taking place at Bois d'Haine: studying them in themselves, and comparing them with facts more or less analogous which medicine has recorded in its annals. After this preparation, and ready at the same time to receive every honest criticism and to profit by it, I have felt justified in making public this result of my study. After all, it is possible that I may fail, even with this preparation; but still I feel that I shall at least be sincere, and that is enough to satisfy my own conscience.

The order which I propose to follow is this. The first part of this report will contain a short biography of the young person. It seems to me impossible to appreciate rightly the phenomena which we have to study, unless we first know the subject in whom they are seen. In the second part, I shall enter into all the details of these facts. Those who have not seen them could not themselves study them, unless they were reproduced, as in a photograph, before them. This being borne in mind, the reader will excuse the detailed *minutiæ* upon which I must necessarily enter. In the third part I shall discuss the hypothesis of fraud; and the last part will be devoted to a discussion of the facts from the stand-point of science.

PART I.

EARLY LIFE OF LOUISE LATEAU.

IN Hainaut,¹ a village known by the name of Bois d'Haine² is situated in the midst of a fertile and manufacturing neighbourhood. On the highway leading to the village, in a quiet sheltered spot, stands a poor little cottage; the walls, however, washed light-buff colour, its green shutters, and its red-tiled roof give it a pleasing and cleanly appearance. It is very small, in fact it is but one story high; two rooms on the ground floor. The largest room is five mètres³ long by four wide; it is both kitchen and work-room. Outside it is a small porch made of rough wood. The other room is only about half the size of the first; it is nearly filled up with the beds of the family. There is a loft over the two rooms: their floor is merely the hardened earth. Underneath the first room a small cellar is made, which raises the floor somewhat and makes the room more healthy. This cottage, then, is truly a poor man's cottage, but its white-washed walls are scrupulously white, and the furniture is kept bright and shining, whilst here and there a few holy pictures adorn the bare walls.

In this cottage, on the 30th January 1850, Anne Louise Lateau was born. She was the third child of Gregory and Adèle Lateau.⁴ Her father, then twenty-eight years of age, was a workman employed in a large metal factory of the neighbourhood. All who knew him testify that he was an upright man, of ordinary intelligence, but little cultivated;

¹ A province of Belgium; Mons is the capital town.

² Bois d'Haine is a village of 1500 inhabitants. It is equidistant from Mons and Charleroi (about 26 kilomètres). It is one kilomètre (two-thirds of a mile) from Manage.

³ The metrical system needs no translation into yards; 5 mètres is about 5½ yards. A third room has been added since this was written, as will be seen in the additional chapter of the second edition.—TRANSLATOR.

⁴ Her mother's maiden name was Pissens.

his disposition was calm and good; he was of low stature, thick-set, strong, and incapable of feeling fatigue; in a word, his constitution was well suited to the rough work of his life. I have learned, after very careful inquiry, that he was never subject to nervous affections, nor had he ever suffered from any kind of hæmorrhage. Toiling and careful, always working at a laborious yet lucrative employment, Gregory Lateau brought up his family in poverty, but above real indigence. His wife's dowry had been the little plot of land on which the cottage just described was built by him. He had therefore the happiness, so rare for a working man, of feeling that his house was his own, and that he could look forward to the future without misgiving. After a few years, this state of happiness was utterly upset by an event as sad as it was unexpected. Gregory, whilst in robust health, caught the malignant smallpox, which was then so prevalent at Bois d'Haine. After a few days' illness, he died on the 17th April 1850. He left three little girls, quite young children. Rosine, the eldest, was three years old; the second, Adeline, was rather more than two; Louise, the youngest, was an infant only ten weeks old. Her birth had nearly cost her mother's life, who was still obliged to keep her bed. Moreover, to complete the sad event, the infant had caught the contagious malady which had proved fatal to her father. The neighbours, driven away by fear, entirely abandoned the infected cottage. Except the watchful little services of the child Rosalie, who went from her mother's bedside to the cradle of her sister, doing her little best to wait on them, they were quite forsaken. Hence a workman entering the cottage twelve days after the death of Lateau saw that the baby was still encumbered with the dry poultices which, the week before, the doctor had ordered to be applied. This visit was most timely. Their last bit of food was gone, hunger was beginning to be felt. Touched by their forlorn state, the good man—let me record his name, Francis Delalieu—instantly sent for some provisions from the neighbours, and attended to the most pressing wants of the baby, who was almost dying. From that moment he

never ceased to take care of the family: he supplied their wants, with almost fatherly solicitude, until the mother had completely recovered. This was not, however, till after the lapse of two years and a half, at the end of which time the widow Lateau had regained all her strength. From henceforward the position of the family was somewhat different: poverty it always was, but a poverty full of courage and self-respect, depending upon good health as its only support. Night and morning the widow took care of her little children. During the day she was obliged to leave them entirely for her out-door work. The two elder children had to take care of the youngest. Their life was more than frugal. Often, during the bad weather, the children had to stay at home without fire; but their constitution was good, they grew in size and strength; and by and by they, too, were able to take their share in working. When she was eight years old, Louise was placed, in the summer, with an old woman, almost as poor as her mother, but who was bedridden, and needed care during the absence of her son at field-work. Later on, it was found possible to send her to school for five months; she showed good abilities, learnt her catechism and a little reading and writing: the whole of her schooling ended here. After having made her First Communion, at the age of eleven years, Louise Lateau went to service to her father's aunt, the widow Coulon, an old person of seventy-eight, who lived with her son and his wife at Manage, and was in pretty good circumstances. There the child was very active, and most devoted to her duties; she gave the day-time to the household work, and often spent a part of the night watching by her sick aunt, who died two years afterwards, still cared for by Louise. At the death of the old woman, her children recommended Louise to a respectable lady in Brussels; but she only stayed there seven months, as she was taken ill. This lady has always retained the deepest respect for the young girl.⁵

⁵ I had the opportunity of seeing Madame D. at Bois d'Haine, whither she occasionally comes to see Louise. She has given me most exact and most favourable accounts of her.

A few weeks' care reëstablished her health. She then went to service in a little farm at Manage, where she has also left, just as at the house of widow Coulon and of Madame D., the same character of devotedness, patient toil, humble and calm piety, and charity for the poor. She was called home by her mother, and has ever since remained there, working as a dressmaker.

Such, in a few words, is the humble life of this poor girl. In order to make the reader better acquainted with her, we will rapidly sketch her portrait.

Louise Lateau, now twenty-three years of age, is rather above the middle height; her face is rounded; complexion moderately coloured; the skin fine and very clear; she has fair hair; her eyes are blue, clear, and bright; her mouth is small, and her teeth very white and beautiful. Her physiognomy is pleasing and intelligent. Without being strongly made, she has a good constitution and sound health—the manner in which she has worked from her early childhood sufficiently proves this. All the great functions are performed regularly. She bears no indication of scrofula, or of any other morbid disposition.

In the course of her life she has had several serious illnesses, a short account of which must here be inserted.⁶ In the beginning of the year 1867 her health was impaired; without being precisely ill, she was out of health; she had but little appetite, and had lost her fresh colour. It is not difficult to recognise by these marks, that Louise Lateau, then sixteen years old, was passing through that phase of chlorosis so common amongst young girls about the age of puberty. She was, however, able to continue her usual work without interruption. In the beginning of September, in the same year, she had a quinsy, which was so violent that her life was considered in danger. At the end of three weeks, however, it was cured. This illness had

⁶ This account will doubtless be read by many persons who are unacquainted with medical studies; I shall therefore endeavour to render my language intelligible to all. When necessary for the clearness of the explanation, I will give a short definition of words and things.

increased her state of chlorosis, and the poverty of her blood manifested itself during the last months of the year 1867 by repeated attacks of neuralgia. 'She suffered especially,' says an excellent doctor living in that part of the country who attended Louise Lateau, 'from neuralgia in the head; the pain was intense, and offered an unusual resistance to the different remedies that were employed.'⁷ Soon afterwards an *eczema*⁸ broke out on the forepart of the arm, and caused a swelling and suppuration of certain ganglions in the hollow of the pit of the arm—not an unfrequent complication of cutaneous inflammations, which, however, in the present case had no further consequences. At the end of twelve days this small abscess was healed.

We come now to the year 1868. Towards the middle of the month of March, Louise Lateau was affected by a malady which it is difficult to characterise exactly. It is certain that she again had violent neuralgic pains, that she entirely lost her appetite, and that at different times she vomited a certain quantity of blood.⁹ Did it come from the respiratory or from the digestive organs? I am unable to decide the question, which is, however, one of no importance. Whichever it may have been, the young girl passed a whole month under strict diet, taking scarcely anything but water and the prescribed medicines. She became so weak, that on the 15th April it was considered necessary to administer the last Sacraments. However, she rallied and improved so rapidly, that on the 21st April she was able to walk to Mass at the parish church, at the distance of about a kilomètre (or two-thirds of a mile). And here I must mention an incident which caused a good deal of talk, and drew, for the first time, public attention upon Louise Lateau. Rumours were in circulation about extraordinary circumstances attending her recovery. It was affirmed that during several

⁷ Dr. Gonne, of Fayt.

⁸ Eczema is an affection of the skin, characterised by small vesicles very close to each other.

⁹ This hæmorrhage began on Passion Sunday, which fell that year on the 29th of March, and took place for the last time on the 15th of April.

days she had illuminations, which were not, indeed, ecstasies, but during which she spoke in an elevated style of holy things, of God, of the priesthood, of poverty, of the love of sufferings, and of charity. People came in crowds; and probably the tales that were told were not altogether unmixed with error or exaggeration. As I was not a witness of these facts, and have not been able to collect really satisfactory evidence about them, I only mention them that I may strictly tell the whole truth, but I shall not dwell on them any longer.

It was at this time that a physiological event occurred which is always important in the life of a woman: the periodical function was established. It appeared for the first time on the 19th April 1868, and ceased on the 21st of the same month—that is to say, three days before the apparition of the stigmata.¹⁰ Since this date the periods have continued without any interruption, and with perfect regularity.

The religious inquiry which is being carried on by ecclesiastical authority, side by side with this medical inquiry, will reveal to us the soul of this young person, her virtues, and her imperfections. To the ecclesiastical authority I therefore leave it. Nevertheless, I do not think it possible to divide the question into two parts absolutely distinct. The extraordinary facts which we have to study stand upon the confines of the natural and the moral orders, and to appreciate them soundly it is not enough to know the organic condition of the subject—we must also know the moral condition. Moreover, I have long been convinced that we are too often wrong in medicine in occupying ourselves exclusively with the material side of man. Undoubtedly man is formed of matter; but upon this matter God has breathed a spirit of life, and the organs are but the instruments of an immortal soul. In studying the problems of our science, so frequently obscure, we ought to accustom ourselves to consider the whole man, to comprehend in the same glance

¹⁰ It is easy to understand that this event has given precision to the girl's remembrance concerning this point.

his double nature. If we continue to concentrate all our attention upon the body, we may be skilful veterinary surgeons, we shall never be true physicians. I therefore think I ought to record here my observations upon the degree of intelligence, the disposition, and the moral qualities of Louise Lateau; declaring, at the same time, that it is purely my own personal appreciation of her, which does not involve the responsibility of any one else whatever.

Louise is very intelligent, but it is an intelligence which has nothing brilliant in it. She has no imagination, and she might be very well described as a person of good sense, without smartness, and without enthusiasm. She has received very limited instruction, but she has developed the first elements which she learned at school. She speaks French with ease, and with a certain degree of purity. She can read, but with considerable difficulty; and write, but not correctly. As for her moral character, she is a simple, straightforward, I might almost say transparent creature.¹¹ It has often happened, in my examination of her, that I laid traps to detect her, if I could, in any insincerity, but I never succeeded. One day, for instance, when she came out of her ecstasy, I asked her what she had seen. She related to me in a few words the scenes of the Passion which had just passed before her eyes. I rejoined: 'But what did our Saviour say?' 'I heard nothing, sir.' 'That's impossible,' I said; 'for we know very well that our Lord during His Passion spoke sometimes to the Apostles, and sometimes to the Jews.' 'I did not hear Him speak.' 'Well, it's very strange; but you will certainly hear Him speak another time.' This 'other time' has never come; she has always told me that she had heard nothing. She loves solitude and silence, and never speaks of the wonderful things which are done in her. She has a few young friends, to whom she has been much attached from her childhood. I know from very accurate information, that

¹¹ Many witnesses, priests or physicians, have employed similar phrases to describe the impression which Louise had made on them. 'She has,' said one of them, 'a soul of crystal—one can see through it.'

the subject of the ecstasies and the stigmata is never named amongst them. It is a closed world, into which her most intimate friends never dare penetrate. She maintains the same reserve even with her mother and sisters; and they, on their part, never introduce the subject in her presence. Her character is one of quiet cheerfulness. In many circumstances she has given proof of a calm, patient, invincible courage. We may here mention a few facts which show these qualities in action.

She has been several times insulted by wretches of the lowest grade of society; she has always borne these outrages without bravado and without cowardice. I have watched her closely in circumstances still more trying. In the month of November 1868 her eldest sister was attacked by a dangerous and complicated typhoid fever which required the most incessant care during six weeks. Her mother at the same time had been ill for two months with pleuro-pneumonia,¹² the cure of which was rendered slow and difficult by an emphysema of long standing. As these illnesses were prolonged the resources of the family diminished; their life was one of real privation. The younger sister was obliged to work to gain their daily bread; Louise, therefore, had almost the sole care of the two invalids. On foot both night and day, she scarcely slept at all for more than a month. The widow Lateau, irritated by her sufferings, had grown exacting and hard to please; she frequently accused Louise of being the cause of all the misfortunes which threatened to overwhelm the family. I saw the young girl amidst these crosses, this fatigue, this want of sleep, and I always found her the same—placid, calm, smiling.

Another striking feature of her nature is her charity. Poor herself, she has always had a passion for helping the poor. When scarcely more than a child she devoted her-

¹² Pleuro-pneumonia is inflammation of the lung and of the pleura—a thin membrane which surrounds the intestines. Emphysema consists in the morbid and permanent dilatation of the vesicles which form the substance of the lung.

self to the care of the sick, with entire forgetfulness of self and unusual tact; even now, when there is a case of serious illness in the village, Louise is sent for, and she joyfully fulfils all the duties of Sister of Charity; when any one dies, it is almost always Louise who prepares the body for burial. In 1866 the cholera, which was prevalent in Belgium, broke out at Bois d'Haine. It cannot be said to have made great ravages there,¹³ but, as in many other places, it created a panic and gave occasion to certain acts of cowardice, which one can easily understand, perhaps even excuse, but which, for the honour of human nature, one would gladly leave untold. The plague struck first a working man's family, composed of seven persons. The four sons, yielding to a panic, abandoned the house, leaving their father, mother, and sister struck down by the disease. The parish priest, whose assistance was needed by others, sent for Louise. She took up her abode in the abandoned house, and alone attended upon the father and mother up to their last hour—they died both on the same day; and she continued her kind care to their daughter until the sons, feeling doubtless some remorse, returned to the cottage for an instant, just to carry their sister away to another house. Thus left alone, Louise laid out the two dead bodies; then, with the assistance of her sister Adeline, placed them in a coffin and managed to carry them out of the infected house. Some men, encouraged by the example of these young girls, then took the bodies to the cemetery. Louise, with the doctor and the priest, continued this work during the whole time that the epidemic lasted. She never left the houses into which the plague had once penetrated; she could not of course be everywhere at once; but she nursed six cholera patients in the month, continually laid out the dead, and not unfrequently even carried them to the cemetery. And she did all this when she was a mere child of sixteen.

Louise has also shown from her childhood remarkable

¹³ There were at this time twenty-five cases of cholera at Bois d'Haine, out of which fourteen deaths occurred.

piety. I must again repeat that I leave this view of the question to theologians ; yet I cannot pass it over in complete silence. If I were absolutely to efface from the picture which I am drawing the religious character which is its chief characteristic, the whole aspect of the facts would not only be incomplete ; it would be changed and disfigured. I therefore record here my own personal observations. I have been struck by the simple and practical character of Louise Lateau's piety. Free from all exaggeration and affectation, she follows the beaten track, but follows it faithfully. In her interior and religious life, as well as in her exterior, there is an indescribable simplicity, discretion, and moderation, which never abandons her.

Such is the moral character of this young person, as it appears to me. And now, that I may complete the picture, it remains that I should say a few words about those who surround her, in order that my readers may fully understand the atmosphere in which she lives, and be furnished with all the particulars to which they are entitled for a just appreciation of the case.

Louise lives with her mother and two sisters. The widow Lateau is fifty-eight years old. Her health is robust. With the exception of a serious illness occasioned by the birth of Louise, she had never been out of health until she was attacked the year before last by pleuro-pneumonia, as I have mentioned. She is of a dry constitution, rather bilious, and an utter stranger to all nervous impressionability. She has never had any hæmorrhage, even at her confinements ; she presents no trace of scrofulous or herpetic tendency.¹⁴ All the great functions take place regularly.

Considered morally, she is a person of almost unpleasant frankness. Nevertheless she is upright, religious, and greatly esteemed by her neighbours. Born in a very humble condition, without instruction, struggling all her

¹⁴ Scrofula is a disease with which the reader is sufficiently acquainted. By herpetic affections we understand the different diseases, and especially constitutional diseases, of which the skin is the seat.

life with extreme poverty, she has preserved a degree of delicacy in her sentiments not often met with under these circumstances. Thus she would never consent, in her moments of greatest distress, to sell her cottage, because it was the place where her husband had lived and where her children had been born. Proud in her poverty, she is hurt when any visitor ventures to offer her money. Profoundly disdainful of all the attention and notice bestowed upon her daughter, she feels great annoyance and often intense irritation at the many inconveniences occasioned by the condition of Louise, and she frequently vents her ill-humour both upon the visitors and upon her children.¹⁵ She has repeatedly tried to be delivered from these importunate visitors. When the venerable Bishop of Tournay made a visit to the cottage of Bois d'Haine, on Good Friday 1869, his lordship asked her whether she had any request to make. Her one and only petition was, that his lordship would stop these visits at once, and let her and her family live, as they had been wont, unknown and undisturbed. Her daughters joined in the same prayer. At last they have obtained their wish. Their cottage is as quiet as in former days.¹⁶

The two sisters of Louise are blessed with a healthy, yet not a robust constitution. Neither in the one nor the other appear any symptoms of scrofula. Hysteria, epilepsy, and every other kind of nervous malady is a thing unknown

¹⁵ Nevertheless her nature is so good and frank, that even during her fits of ill-temper she does full justice to Louise. I have several times taken advantage of these moments of vexation to find out her most secret thoughts respecting the character, qualities, and faults of Louise. She has always declared to me with ingenuous simplicity that she had never seen any fault in her, that she had never been guilty of the slightest disobedience to her, &c.

¹⁶ In the midst of such importunate and untiring solicitations, which come every day, not only from different parts of Belgium, but also from other countries—France, England, Italy, Germany, Russia, &c.—it has been impossible to protect Louise absolutely from any visitor seeing her. The very force of circumstances has necessitated permission being granted for certain persons to enter the cottage every Friday; but this has been allowed *during the ecstasy only*, when the young person is not aware of what takes place around her.

in either of them, as it was also in their father and mother. They are not subject to any kind of hæmorrhage whatever. They are calm and pious young women, shrinking from notice and from publicity.

The medical facts of the case may now properly be stated.

PART II.

DESCRIPTION OF THE PHENOMENA.

THE phenomena observed in the case of Louise Lateau are of two kinds; those of the stigmata, and those of the ecstasy.¹ As these terms are used in medicine as well as in theology, we can employ them without any prejudgment as to the nature of the facts.

I. *Of the Stigmata.*

The first flow of blood occurred on the 24th of April 1868; this was a Friday. On that day the young girl noticed that blood was issuing from the left side of her chest. With her habitual reserve she said nothing about this occurrence. On the following Friday the flow recurred

¹ As I have said before, I use the word 'ecstasy' in its ordinary and medical sense. As a physician, I have not to consider the various theological definitions of the ecstatic state, its degrees, and its characters. Neither is it my province to study the nature of the visions of Louise Lateau, of the light which then surrounds her, or of the effects produced in her soul by these visions and this light. That all belongs to an inquiry of a theological and moral character. The same remark applies to the observations made with relics and blessed objects, as well as to the *rappel* (to consciousness).

Louise, insensible to the voice of persons who try to waken her from her ecstatic sleep, insensible even to the voices of her mother and sisters, immediately comes to herself at the voice of her confessor, and, speaking generally, of those who have jurisdiction over her. The question of the conditions of this *rappel*, and of the objections that may be made to it, belong to theological controversy, upon which I do not wish to touch.

In writing these pages, I am constantly preoccupied with the desire of not anticipating theological inquiry, and of keeping within the domain of medicine. Sometimes it is difficult to draw the line of demarcation; but I prefer to say nothing about some of my personal opinions, and thus to lessen the interest my recital might have for religious minds, in order that I may keep within the narrower limits of physiological observation, and of the great circumspection imposed upon me.

in the same place; in addition, blood escaped from the upper surface of both feet. Neither did she make public this fresh incident, but she confided it to the director of her conscience. The priest, though he considered the fact extraordinary, did not wish the imagination of the young person to dwell upon it; he reassured her, and advised her not to speak of it. On the third Friday, the 8th of May, blood flowed in the course of the night from the left side and from both feet. Towards nine in the morning it escaped in quantity from both hands, as much from the backs of the hands as from the palms.

It was impossible to keep the fact secret any longer, and the curé of Bois d'Haine counselled Louise to consult a physician. Since this time the bleeding has recurred in the same places every Friday, with certain variations that we will record later on. Finally, on the 25th of September 1868, the blood, for the first time, oozed from her forehead.

We will now describe the different stages of this phenomenon. If in the course of the week, from Saturday to Thursday morning, an inspection is made of the parts from which blood flows on the Friday, this is what is seen: on the back of each hand there is a rather oval surface nearly one inch in length. It is rather more pink in colour, and it is smoother than the neighbouring skin, and does not show a trace of oozing of any kind; on the palm of each hand there is also an oval surface, of a light-pink colour, corresponding precisely to the stigmatised surface of the back; on the upper aspect of each foot the impress has the shape of a long square with rounded angles, the square being a little more than an inch long. To conclude, there are on the soles of the feet, as on the palms of the hands, small surfaces of pinkish-white colour.²

² It will perhaps not be uninteresting to record here the exact dimensions and situations of the stigma-bearing parts.

Right hand: the dorsal stigma is of somewhat oval shape; its length, parallel with the metacarpal bones, is 27 millimètres (1.063 in.); its breadth 15 millimètres (.589 in.). The metacarpal bones are the five between the wrist and the fingers, constituting the breadth of the hand; the

When these parts are examined with a magnifying-glass,³ the epidermis is seen first to be entire, delicate, and free from any chafing; through the epidermis is recognised the derma or true skin, with its usual characters; thus, in the palms of the hands and in the soles of the feet the papillæ are seen arranged in linear parallel series, and separated by small furrows. These papillæ, examined by the glass, seem slightly atrophied and flattened, and this gives to the skin the smooth appearance already mentioned.⁴ When one or other of the stigmata does not bleed for several weeks, the pink colour disappears, the papillæ recover their usual appearance, and the place of the bleeding is not to be recognised.

The impressions on the forehead do not remain: after Friday the points that have bled cannot be recognised.

metatarsal are between the instep and the toes. The stigma corresponds in position with the space between the third and fourth metacarpal bones, partly covering them; its farther extremity is 4 centimètres (1·574 in.) from the cleft of the fingers. The palmar stigma corresponds precisely in position with the dorsal one; it has the same oval form, and is 2 centimètres (·787 in.) long.

Left hand: dorsal stigma, shape somewhat oval; 33 millimètres (1·295 in.) in length, 2 centimètres (·787 in.) in breadth; its centre corresponds with the fourth metacarpal; its further extremity is 4 centimètres (1·574 in.) from the finger cleft. The left palmar stigma corresponds in position with the dorsal one; its somewhat oval surface is 25 millimètres (·984 in.) long by 15 millimètres (·589 in.) broad.

Right foot: dorsal stigma; it resembles an elongated square, with rounded angles, 33 millimètres (1·295 in.) in length by 18 (·709 in.) across. It is over the space between the third and fourth metatarsals; its further extremity corresponds with that of these bones. Plantar stigma is rather rounded, three-fourths of an inch across; its centre is about the third of an inch further back than that of the dorsal one.

Left foot: the dorsal and plantar stigmata have the same dimensions and positions as on the right foot.

³ I have always used an excellent lens magnifying twenty diameters.

⁴ The skin may be divided into two layers: the *epidermis* or scarf skin, delicate and transparent, is moulded on the *derma*, which is the deeper and thicker part of the skin; and in this the vessels and nerves terminate. Upon the skin, especially of the palms and the soles, are seen very small rounded eminences, arranged in straight or wavy lines; these are the papillæ and the papillary lines; the lines are separated by furrows, traced as it were with the point of a pin,—these are the papillary furrows.

A feeling of delicacy that will readily be understood prevented me from examining the side during the week ; but I have been able to do so with all necessary attention on the Friday, during the ecstasy, when the young person does not know what is passing around her.

I will give an account of this examination later on.

Hitherto I have described the condition of the stigma-bearing parts, as they are on other days than Fridays. The first symptoms indicative of the approaching efflux of blood occur on the Thursday, generally about noon.⁵ On each of the pink surfaces already described on the hands and feet a vesicle is seen to commence, and to rise little by little. When completely developed it is a rounded, hemispherical prominence on the surface of the skin ; its base is the same size as the pink surface on which it rests—that is, nearly an inch long, by a little more than half an inch broad : this vesicle is formed by the epidermis detached from the dermis, and elevated as a half-sphere by serous fluid within. This serous fluid is clear and transparent ; yet it often assumes a reddish tint more or less deep on the palms of the hands and the soles of the feet. This is because the epidermis in these places is thick and resisting, and does not separate quickly enough ; the blood, oozing out before the separation, mingles with the serosity. There is not any swelling or redness in the zone of skin round the vesicle. The efflux of blood begins generally in the night, between Thursday and Friday, almost always between midnight and one o'clock. It does not take place from all the stigmata at once, but in succession, and not in any regular order. Most frequently it commences at the side ; and at different hours the stigmata of the hands, the feet, and the forehead successively begin to bleed.

The phenomenon occurs thus : the vesicle bursts, and the contained serosity escapes. This occurs in different ways ; sometimes by a rent lengthways, sometimes by a crucial or a triangular division. In the last case the

⁵ Sometimes the vesicle is already visible in the morning of Thursday ; it has even been seen to begin on the Wednesday, but very seldom.

rupture of the vesicle suggests the puncture of a leech, but this is a mere resemblance ; to prove which it is enough to ascertain the entire absence on the hands and feet of those three-cornered white and indelible scars which always follow leech-bites. But a still more decisive observation is that this triangular rent only divides the epidermis : in fact, if this be removed by rubbing with a cloth, the little wound is no longer seen, and the true skin is found to be quite intact.⁶

Directly after the rupture of the vesicle and the escape of the fluid, blood begins to ooze from the bare derma.

The flow of blood almost always detaches the pieces of scarf-skin that make the vesicle, so that the bleeding surface of the true skin is quite bare ; sometimes, however, and especially on the palms of the hands and the soles of the feet, where the epidermis is very tough, the blood collects and forms a clot in the partly-torn vesicle.

At each of my Friday visits I have taken pains to satisfy myself that the left side of the breast was bleeding. I have four times examined the part uncovered, and this is what I have ascertained : the flow occurs at the level of the space between the fifth and sixth ribs to the outer side, and a little below the middle of the left breast. At my first examination, on the 30th of August 1868, there was no trace of vesicle ; the epidermis was not detached from the derma ; the colour of the skin was natural. The blood could be seen oozing from three minute points scarcely visible to the naked eye ; these three points were in triangular form, with about half an inch between each. At my three other inspections a vesicle had formed, as on the feet and hands ; it had ruptured, and the blood was flowing from the bared derma over a round surface rather more than half an inch across.

⁶ It is not for medical men that I need point out that every puncture which bleeds, such as the bite of a leech, must pass through the epidermis, which contains no vessels, and consequently no blood, and must pierce the thick derma or true skin.

I have had an opportunity of examining four times the bleeding of the head.⁷

Underneath the hair, which is soaked with blood and matted together, it is difficult to study the state of the skin; but to examine it on the forehead is, of course, easy. There, there is no appearance of vesicle, no denuding of the derma, no change of colour in the skin. The blood is seen to ooze from twelve or fifteen points situated round the forehead. A band, two fingers' breadth in width, encircling the head and passing across the middle of the forehead, at an equal distance from the eyebrows and the roots of the hair, would cover the bleeding circlet. This circlet is slightly swollen, and is the seat of a painful sensation, which is increased by pressure. When the bleeding points are examined with a lens, the blood is seen to filter through minute abrasions of the epidermis. Most of these are triangular in shape—like the bite, one would say, of a leech, but a leech of an almost microscopic kind; for these abrasions are scarcely visible to the naked eye. Others of them are crescent-shaped; and others again are quite irregular.

The quantity of blood lost through the stigmata on a Friday varies. During the first few months after their appearance, before the ecstasies occurred, the flow was more abundant and more prolonged than at present; it often lasted twenty-four hours, from midnight to midnight; and those who first saw it estimated the quantity of blood from the nine wounds at about $1\frac{3}{4}$ pints (one litre). It is difficult to make a precise estimate, and this particularly because the greater part of the liquid is taken up by the linen which covers the side, and is wrapped round the hands and feet. The following is the result of my own observations on this point: When I visited Louise for the first time, on Friday, the 30th of August 1868, the duration and the amount of the flow had already

⁷ Since the first edition of this book, I have observed the bleeding of the head every time that I have seen Louise on a Friday; at the present time, in fact, this phenomenon occurs every week.

diminished ; the bleeding, which commenced towards midnight, ceased about four or five o'clock in the afternoon ; I counted on that day fourteen pieces of linen much soaked with blood.⁸ Moreover, the left foot having remained uncovered for some time during the ecstasy, the blood had flowed upon the ground, where it formed a clot the size of the two hands. I am certainly below the mark in estimating the total quantity of blood lost at 250 grammes (nearly nine ounces, being about one quarter as much as before mentioned).

I have several times seen the flow present about the same conditions as to duration and abundance ; it has never to any extent exceeded this average under my own observation. At other times it has been less in quantity and less prolonged. Sometimes, though rarely, the blood dries up and crusts towards eleven or twelve o'clock ; and on two Fridays it has not appeared. On one occasion the stigmata remained quite dry ; and on the other the vesicles formed as usual, but the flow was only of serous fluid slightly tinged with red. During these two Fridays the ecstasy occurred in the usual manner. At the present time the bleeding of the stigmata takes place regularly every Friday, and the bleeding crown on the forehead and the head, which at first appeared but rarely, now shows itself every week.⁹

I have carefully examined the characters of the blood ; its colour is neither the crimson of arterial nor the blackish tint of venous blood ; it is red inclining to violet—the

⁸ The largest of these was nearly 4 feet long by 1½ broad ; the smallest 20 inches by 5 ; the others were between these sizes.

⁹ The following is an exact statement of what is seen at the present date (25th December 1872). The bleeding of the stigmata commences, as before, on Friday, between midnight and one o'clock. When, in the morning, towards six o'clock, Holy Communion is brought to the stigmata, the blood flows very abundantly from the head, the side, and the hands ; the bleeding of the feet is less in amount than formerly. Towards ten or eleven o'clock the flow from the forehead and the head begins to lessen gradually ; the bleeding from the hands continues equally profuse. For the last six weeks, the hands bled during the whole time of the ecstasy, that is to say, until half-past four o'clock, and even later ; previously the flow sometimes stopped before the ecstasy began.

colour of blood in the capillaries. Its consistence is normal; it becomes clotted on the linen and on the edges of the wound from which it flows: sometimes even it coagulates as it escapes from the capillaries, and forms on the face of the wound little incrustations, that look very like 'proud flesh.' I have seen doctors make this mistake. To correct it, it is enough to examine these little concretions with a lens, or to wash the wound; as the water removes them, the bleeding surface of the true skin is seen quite bare. With two of my colleagues¹⁰ in the Faculty of Medicine, accustomed to microscopic research, I arranged a microscope in the cottage, and we examined the blood the moment it came from the stigmata. We ascertained its characters to be these: the plasma or fluid portion is colourless and perfectly transparent; therefore it does not contain any trace of hæmatin in solution. The red corpuscles have their oval perfectly regular shape; their edges are smooth, entire, not at all indented or curled up (framboisés). The white corpuscles seemed to us in normal proportion, one to three or four hundred of the red.¹¹ To complete this description we must record that the stigmata are painful. The extreme reticence of Louise has not allowed me to ascertain exactly the degree and the character of the pain; but by observing her features, her position, and her movements when not in ecstasy, I have satisfied myself that she must suffer acutely.

The flow of blood ceases, as we have already said, at somewhat different hours. On the following day, Saturday, the stigmata are dry, and rather shining; here and there are seen some scales of dried blood, which soon fall off. It is

¹⁰ M. Hairion, University Professor of Hygiene, Dermatology, Ophthalmology, &c.; and M. Van Kempen, Professor of General and Special Anatomy.

¹¹ The blood is formed by two constituents: a colourless fluid, called *liquor sanguinis* or *plasma*, and corpuscles or globules. These corpuscles are of two kinds: the red are the more numerous, are of a round, flattened, disc-like shape, and about $\frac{1}{3200}$ th of an inch in diameter. These corpuscles give the blood its red colour. The colour of the corpuscles is due to a substance which has received the name of hæmatosin or hæmatin. The white corpuscles or leucocytes are colourless, spherical, and of rather larger diameter than the red ones: $\frac{1}{2500}$ th of an inch.

unnecessary to add that there is no sign of suppuration. Louise, who on the evening before suffers much pain in using her hands and in standing, resumes very early in the morning her usual work, which she only interrupts in order to go and fulfil her religious duties at the parish church.

II. *Of the Ecstasies.*

The weekly ecstasies of Louise Lateau began on Friday, July 17, 1868—thirteen weeks after the first appearance of the stigmata. Nevertheless, an observer, who has followed with as much intelligence as discretion the development of the phenomena,¹² had remarked, before that time, certain passing raptures. He had kept note of them, but had not mentioned them to any one, and specially had he been careful not to talk about them with the young girl. The ecstasy recurs every Friday, commencing, as we have said, between eight and nine o'clock in the morning, and terminating towards six in the evening; it has sometimes been prolonged until after seven. The ecstasy therefore lasts from nine to twelve hours without interruption.¹³

Louise has had raptures of lesser duration and of a different kind at the times of the great religious festivals of the year, either at home or, very rarely, at church¹⁴ during the services. But as these passing raptures have had but few witnesses, and as I have not been able to study them myself, I merely mention them casually. The ecstasy which I am about to describe is that of the Friday. It usually commences during the recollectedness of silence and prayer; sometimes while she is speaking, or even when at work. I have been present several times at the beginning of the phenomenon under these different circumstances, and can describe it in its details. When, on the Friday morning,

¹² M. Niels, Curé of Bois d'Haine.

¹³ The ecstasies do not last so long now; they begin at a quarter to two, and finish at half-past four.

¹⁴ I must again beg the reader to remember that I do not attach to the word *ravissement* (rapture) the exact meaning which theologians give it.

Louise is left to herself, the wounds on the hands, and the flow of blood of which they are the source, making work almost impossible, she is accustomed to pray. I have ascertained that she then makes use of the most simple and, if I may so express it, the most familiar of prayers; she says the rosary in a low voice. She is seated on a chair, sometimes a little cane arm-chair; her bleeding hands are joined underneath the linen in which she conceals them: her attitude is collected, her face calm and serene. Suddenly the eyes become fixed, motionless, turned towards heaven—the ecstasy has begun. As I have already said, I have several times seen the ecstasy begin during a conversation. I (will) transcribe my notes: ‘It is 7.30 in the morning, I begin a conversation with the young girl, and I try to keep it to the most indifferent subjects; I ask her about her occupations, her amount of education, her health. She answers these questions in a simple, exact, laconic manner. During this interview her appearance is calm, the expression of her face natural, and her colour normal; the skin cool, the pulse 72 beats a minute. After some time, there is a short pause, the conversation flags; I wish to renew it, but perceive that Louise is motionless, the eyes fixed above, rather to the right—she is in ecstasy.’¹⁵

Dr. Imbert-Gourbeyre, professor in the School of Medicine at Clermont-Ferrand, has been a witness of the beginning of the ecstasy under the same circumstances. ‘I examined and questioned Louise for an hour and a quarter,’ he says; ‘my last question was about the cholera patients she had nursed. She said she had seen die nine or ten of those whom she had nursed. I asked her whether she were afraid. She replied, “No.” “Do you like nursing the sick?” added I. I wrote this question, my eyes fixed on my paper. Louise did not reply. I looked at her; she appeared to be wrapped in ecstasy.’

¹⁵ It is important to notice that, from the moment that the eyes are raised and become fixed in contemplation, the ecstasy has begun. Louise no longer replies to those who speak to her; she is insensible to all outward stimuli.

The ecstasy also begins during work. I have not witnessed this. A venerable American prelate, Mgr. d'Herbomez, Bishop of British Columbia, having been authorised to see the young girl, presented himself at the little house on Friday, August 13th, 1869, towards eight o'clock in the morning. Louise was working at a sewing-machine. The stigmata bled copiously both on her hands and feet; blood oozed from her forehead and head in a regularly-formed circle, and fell on her cheeks, temples, and neck: the sewing-machine was covered with it, and the young girl was evidently making most painful efforts to continue her work.¹⁶ Whilst the bishop examined and questioned her, the noise of the machine suddenly ceased. Louise was in ecstasy. Many distinguished ecclesiastics, and, quite recently, Canon Hallez, professor at the Seminary of Tournay, have been witnesses of this commencement.

The ecstasy is therefore proved. Let us try to describe her state exactly. During the greater part of the time Louise remains seated. The body, inclining slightly forward, rests on the edge of the chair, motionless as a statue; the blood-stained hands are laid upon her knees, concealed in the linen which is wrapped round them; the eyelids are unmoved, and the eyes gaze upwards, rather to the right. The expression of the young girl's face is one of profound and completely absorbed attention; she seems to be lost in far-off contemplation. The expression as well as the attitude frequently changes. At one time the features expand, the eyes become moist, and a radiant smile half-opens the mouth. At another, the eyelids close, and half veil the sight; the face contracts, and tears flow slowly down the cheeks. Sometimes, again, she becomes pale, and an expression of extreme terror is seen, accompanied often by tremblings and a stifled cry. Sometimes the body slowly turns, and the eyes move, as if to follow an invisible

¹⁶ Work on Friday morning was at this time imposed on her by a religious, who was instructed to study the facts from a theological point of view. He desired her to resist the ecstasy with all her might; and for this end, as a means of distracting her attention, he ordered work, in spite of the difficulties and suffering it entailed.

procession. Sometimes, again, she rises, advances, and poising herself on tiptoe, seems about to hasten away. Her hands are raised, either joined or remaining outspread in the position of the 'Orantes' of the Catacombs. The lips move, she seems to pant for breath; the glance brightens; and this countenance, ordinary-looking before the ecstasy, becomes transfigured, and shines with a truly ideal beauty. Add to this spectacle the attendant circumstances of the stigmata; the forehead crowned with its bleeding circlet, from which the blood streams on to her temples and cheeks; the small white hands, each marked with a mysterious wound, from which pass forth, like rays, the tracks of blood—place in front of this wondrous spectacle groups of men and women of all ranks, amongst whom there is not a single figure which does not express respectful emotion—and you will have some idea of the scene of which we have often been the witnesses at Bois d'Haine. Towards half-past one, as the time of the scene of the prostration which I am about to describe draws near, the ecstasica often falls upon her knees, her hands joined, and the body bent far forwards; her face assumes an expression of more and more profound contemplation. She remains in this position for about half an hour, rises, and reseats herself. Towards two o'clock the scene changes; the ecstasica leans slightly forward, rises rather slowly; then suddenly, and as though propelled forward, falls with her face to the ground. Lying extended in this position on her chest, the head rests on the left arm, the eyes are shut, the mouth half open, the lower limbs perfectly straight, the dress covering them completely.

At three o'clock she makes a sudden movement; the arms extend themselves in the form of a cross, the feet cross over each other, the front of the right foot resting on the sole of the left. She remains in this position till nearly five o'clock. Then raising herself as it were with a bound, she kneels in the attitude of prayer. After some minutes of profound absorption, she reseats herself.

The ecstasy lasts till six or seven o'clock.¹⁷ The attitude as well as the expression continues to change; it seems to reflect different impressions of her soul. The ecstasy closes with a fearful scene. The arms fall on either side of the body, the head bows itself on the chest, the eyes close, the nose becomes pinched, the face assumes a deathly pallor, and is covered with a cold sweat; the hands are icy, the pulse absolutely imperceptible; the rattle is heard.¹⁸

This state lasts from ten to fifteen minutes, then life wakens again; warmth revives, the pulse quickens, and colour returns to the cheeks; but for some few minutes longer the indefinable expression of ecstasy is there. Then, suddenly, the eyelids droop, the features relax, the eyes look gently from one person to another, and the ecstasy is at an end.

On following attentively the different phases of the ecstasy, we are at once convinced that whilst they are in progress, the intellect, far from being deadened, is, on the contrary, in most active operation. Louise is quite unconscious of her external actions, and of what has passed around her, but recollects perfectly what has passed within her mind. On this point I have often questioned her. Her recollections are very clear and precise, but she always feels reluctance to relate them, and few have ever received her confidence as to them. However, having been commanded by her bishop to answer all my questions, she has done so, simply, quietly, and clearly. According to her account, she finds herself, at the beginning of the ecstasy, surrounded by extensive and brilliant light; figures then begin to pass before her eyes, and the successive scenes of the Passion are displayed to her. She relates them concisely, but with a singular clearness. She sees our Saviour. She describes His person, His clothing, His wounds, His crown of thorns, His cross. He pays no attention to her; does not look at

¹⁷ As before observed, the ecstasy lasts now a shorter time. It begins at half-past one; the prostration occurs at half-past two. She places herself like a cross at three o'clock exactly. The ecstasy finishes at half-past four.—*Note in the second edition.*

¹⁸ This kind of agony now takes place very rarely.

her or speak to her. With the same precision and clearness she describes those by whom He is surrounded; the Apostles, the holy women, and the Jews.¹⁹

We have now to describe the condition of the different organs of the body and of their functions during the ecstasy. This condition is not exactly the same in the different phases.

During the first period, from eight o'clock in the morning until two in the afternoon, Louise Lateau is seated, and the organic and functional condition changes but little; the skin is cool, the face its usual colour; the breathing is regular, so noiseless and calm that careful attention is necessary to follow it; the circulation goes on just as in the waking state; the pulse is regular, compressible, without undue tension, beating about seventy-five times a minute. From time to time the heart-beats become faster or slower, and a sudden flush or a deathly pallor overspreads the face; these functional changes accord with the play of the features, and evidently are the outward tokens of mental impressions.

From midday on Thursday, when she dines more sparingly even than usual, till eight o'clock on Saturday morning, Louise takes absolutely no nourishment, and does not drink a drop of water. She does not feel the want of it, and, moreover, cannot retain anything. It has happened several times that I have ordered her on a Friday to take something to eat or to drink; she took it without any objection, but in a few minutes all returned. Despite this entire abstinence from liquid, the tongue, examined at different hours of the day, was always broad and moist.²⁰

¹⁹ The notes I have put together from my questioning of the ecstatics after the ecstasy are extensive and detailed; but this general indication seems sufficient for the purposes of a purely medical inquiry.

²⁰ According to the highest testimony, Louise Lateau has for eighteen months lived without taking any nourishment whatever, and yet has not grown thinner or suffered in her health, which has remained good. This phenomenon, more extraordinary even than those of the ecstasies and of the stigmata, should, in order to assume the character of a scientific fact, be subjected to proofs similar to those of other facts related in this book. Having laid it down as a rule to record in this work only such facts as I could myself supervise and establish by indisputable proofs, I limit myself

The principal excretions are suspended: she has never been known, on Fridays, to leave the room in which she is under observation.

It was necessary to study carefully the condition of innervation, and especially the faculties of movement and sensation.²¹ To the touch, the muscles of the face, the limbs, and the body offer no abnormal tension; they are not the seat of any spasmodic contraction. As already mentioned, Louise is seated on the edge of her chair, her body slightly inclined forward, in the attitude of one absorbed in a profound contemplation. Her only movements are in accord with the scenes which she is witnessing; thus, at times, as already said, the body raises itself, the hands join or separate, the mouth half opens with a smile, or the brow is deeply knitted. When the limbs are made to move, the result varies: sometimes they retain the position given to them. Thus, when the upper limbs are raised, they retain for nine or ten minutes the position in which they are placed, then they fall again by degrees; it is the same with the lower limbs. Nevertheless, if the young person be raised from her seat as if to put her standing, there is apparent a general condition of muscular relaxation, and when she is no longer supported she falls back upon the chair.

One special point must be noted here; it is that during the prostration on the ground, when the arms are extended crosswise and the feet are crossed one over the other, a certain resistance is felt in altering their position, and they immediately resume it.

The functions of the senses are suspended. Let us examine them in turn.

The pupils are dilated; we have already said that the eyes are widely open. At the beginning of the ecstasy, some

to noticing here this new phenomenon; and before speaking of it from a scientific point of view, I will wait until I have been able to study it myself under the strict and unexceptionable conditions which such a study requires.—*Note in the second edition.*

²¹ Innervation is the term for that vital process by which nervous energy is given to any part of the body.—TRANSLATOR.

slight and partial winking continues ; but when the ecstasy is at its height the eyelids are altogether motionless, and during whole hours there is not the slightest winking to be observed. The eyes, fixed on the far distance, do not respond to ordinary stimuli ; an object may be passed suddenly before them, or a bright light brought rapidly near them, without causing any movement of the lids or of the eyeball itself.

Hearing, like sight, is in abeyance, or at least the ear is insensible to ordinary excitants. Several times it has happened that one of the observers placed behind her has suddenly shouted loudly in her ears, and never has the slightest start given evidence that the auditory nerve transmitted the perception. Sensation, in general, is almost entirely absent during the ecstasy. I say, *almost* entirely. This reservation is necessary, for there is in fact one part of the body where sensation continues in a slight degree—it is the *conjunctiva*.²²

In every other part of the body I have found it impossible to produce the slightest sign of sensation. I have made many trials, and will now briefly record my experiments. It is well known that the best means of ascertaining the continuance of sensation is to observe the reflex movements when the skin or mucous membranes are strongly irritated. These movements indicate, beyond the control of their subject, the slightest traces of sensation.²³

²² The conjunctiva is that delicate membrane which lines the inner surface of the eyelids, where it is rose-coloured, and thence passes over the eyeball, where it becomes very thin and quite transparent. The persistence of sensibility in the conjunctiva explains a phenomenon which I have several times observed in Louise Lateau : a bright light may be suddenly brought near the eyes without producing a wink ; but if the open hand is rapidly pushed towards the face, as if going to strike it, a slight winking occurs ; and this is caused by the impact of air on the conjunctiva. A similar movement occurs when this membrane is touched by the tip of the finger.

²³ By *reflex* movements are understood the involuntary movements produced when the sensory nerves are excited. There are two kinds of nerves, the sensory, which conduct to the nervous centres—the brain and spinal cord—the impressions received by the senses ; and the motor or conductors of the power of movement, which pass *from* these centres into

I have tried this test, and have varied it in different ways. Thus, I have irritated with a feather those mucous membranes which are most sensitive in ordinary conditions, as the membranes of the nose and of the ear, and have held ammonia-water to the nose: these trials have given no result.

As the skin is less sensitive than the mucous membranes, I made trial of stronger irritants: thus, with a needle I sharply pricked uncovered parts, as the face and hands; I have often passed a large pin right through a fold of skin of the hands or fore-arm, and this I could only do with an effort and a boring action. I have left the pin thus buried in the thickness of the skin, and have pushed it in different directions. At other times I sharply thrust the point of a pen-knife into a limb, and often so deeply as to make blood come. To be absolutely certain that the young person should not be able to foresee my intention, and prepare herself in some manner to suffer the pain and brace herself up, I remained for some time quite still behind her chair, and then suddenly pierced the skin of the nape with the pen-knife, so as to make the blood spurt out. All these trials ended in the same result, viz. that neither I nor any of the medical men, or the other witnesses of these experiments, succeeded in detecting the slightest indication of sensation, or, in particular, the slightest contraction of the muscles.

Finally, I made a still more decisive experiment. We know what acute and absolutely unbearable pain is caused by strong electric currents. I made use of an electro-dynamic apparatus, which gives, when at its maximum inten-

the muscles. Now, when a sensory nerve is stimulated, there is caused, in spite of the patient, contraction of certain muscles—in other words, certain movements. These are called *reflex*, to distinguish them from *voluntary* movements; it is as if the stimulation conducted by the sensory nerve to the nervous centre was *reflected*, as it were, independently of the patient, to the motor nerve to set it to work. Thus a sharp prick on the hand will make it draw back, and tickling the inside of the nostrils will provoke spasmodic contraction of the expiratory muscles; that is to say, sneezing. We call ‘mucous’ those rose-coloured membranes which line the mouth, the nostrils, &c., and are continuous with the skin at the edge of these cavities.

sity, currents so strong that no one can bear them for more than five or six seconds. After different trials, which produced no sign of sensation, I applied the two conductors to the inner surface of the fore-arm (where the skin is very thin and very sensitive), and through this region I passed the electric current for seventy seconds. I could not obtain the slightest evidence of sensation. I made use also, without result, of the electric brush. Finally, I applied the current to the face, where sensation is still more acute. By placing in succession the two conductors on different parts of the face, I produced strong and prolonged contractions of the different muscles through which the current passed. I thus in succession threw into spasmodic contraction all parts of the face; and during this experiment the eyelids, widely open as usual, did not wink once; and her gaze maintained its profound and extraordinary composure.²⁴

Such is the condition of the organic functions during the first part of the ecstasy; during the second they undergo some changes. Thus, when the ecstática is prostrate with her face upon the ground, the pulse becomes so small, so thready, that it is barely perceptible. Some persons not accustomed to feel it have asserted, in all sincerity, that it was quite gone. For my own part I have always perceived it, though extremely small. Especially is it almost imperceptible during the period of the agony. The pulse becomes very quick at the same time that it becomes weak; as well as one can count—and it is not easy to do so—the beats are from 120 to 130 in the minute. The respiratory movements become more and more feeble; to be sure that they still continue, great attention is required, and often special modes of observation must be made use of.²⁵

²⁴ When I undertook these experiments, rather cruel in their nature, I felt already satisfied myself that the ecstática was perfectly insensible, and consequently felt no pain from them.

²⁵ Thus, fixing the eyes on the fringe of the little shawl which covers the shoulders of the ecstática, it is seen to be stirred by a regular movement communicated by the breathing, and by which the respirations can be counted, as the beats of the pulse can be by the movements of the lever of the sphygmograph.

A remarkable fact, and one which I have verified several times, is, that contrary to a well-established physiological law, whilst the pulse quickens more and more the respiration grows slower in the same proportion. Dr. Imbert-Gourbeyre has also observed this peculiar circumstance. He has noted the gradual rise of the pulse from 90 beats per minute to 130; whilst the number of the respirations fell from 18 to 10. As the respiration thus becomes feeble, and the pulse diminishes to a scarcely perceptible thread, the temperature of the skin becomes lower, and a cold perspiration breaks out. As already mentioned, reaction occurs at the end often or twelve minutes; the pulse regains its normal strength and frequency; the respiration rises again; the skin returns to its usual warmth. The young person reënters ordinary life from the world of ecstasy without any transitional period. She does not complain of muscular soreness, nor of headache, nor of any inconvenience whatever. The body is active, the features composed, the look calm and clear, the intellect bright.²⁶

²⁶ After the ecstasy, the pulse beats 72 to 75 in the minute; it is elastic, of medium strength, perfectly regular; the inspirations are as full as usual, 22 in the minute; the skin is cool, neither dry nor moist.

PART III.

OF THE GENUINE CHARACTER OF THE FACTS : DISCUSSION OF THE HYPOTHESIS OF A FRAUD.

THE idea of a fraud has never been credited by those who know Louise Lateau. Her upright conduct, her simple and modest piety, her heroic charity, are in their eyes the very opposite of hypocrisy. The case could not be the same for those to whom Louise was a stranger. The first impression produced in their minds by the recital of these occurrences was one of distrust. It was generally suspected that this was some pious fraud which the first glance of science would be enough to detect. I make no difficulty of confessing that I was altogether under this impression when I entered, for the first time, the little house at Bois d'Haine. This doubt was natural, legitimate, and in fact necessary; but it soon disappeared on contact with the facts.

If we regard only the production of the stigmata, the first difficulty that fraud would have found would have been to procure what was necessary to produce the wounds. Since the commencement of the phenomena the eyes of the public have been directed to all the actions of the young persons and of their mother. How could they buy, without betraying themselves, blisters, caustics, instruments, anything? For, indeed, we must acknowledge that they would have to resort to several operations, since, not to mention the stigma of the breast, the blood escapes from the forehead by abrasions; from the hands and feet by vesicles.

But let us waive this difficulty, and suppose that Louise Lateau possesses all the apparatus necessary for her work of deception; how will she, a young uneducated girl,

assisted, if you will, by two or three accomplices as cunning as herself, proceed in order to cause a phenomenon—that the physician with his special knowledge and the resources of his art cannot accomplish? It is a question, in fact, of making the blood flow from nine or ten parts of the body, keeping up the flow for half a day, often for longer still, under the eyes of witnesses who would not allow any touching of the bleeding surfaces for the purpose of opportunely reopening them. But the impossibility of fraud is much more evident still when the ecstasy is considered. How, in fact, can we suppose that a young girl brought up amidst the hardships of manual labour, debarred from all education, who has seen nothing and read nothing, can act, every week, for a whole day, scenes which would require the consummate skill of a professional actress; that she can simulate paralysis of the senses, and, in particular, a complete insensibility to the most painful irritants; that she can control at pleasure functions which are in their very nature beyond the power of the will; that is to say, that she can quicken or retard the heart-beats, raise or lower the temperature of her limbs, retard and even suspend those excretions which constitute the most humiliating, and at the same time the most convincing, evidence of human weakness.

It is evident, then, that even if the problem of Bois d'Haine had only one unknown quantity—*either* stigmatisation *or* ecstasy—it would be very difficult, if not impossible, to find its solution in the hypothesis of fraud. But the question becomes singularly complex when the endeavour is made to account for these two facts at once, facts nevertheless connected together, which we cannot logically disjoin, and which must be taken together and explained together.

How can we suppose that this young girl carries on at the same time two almost contradictory frauds?—that is to say, that she counterfeits the ecstasy with the immobility and insensibility which characterise it, and produces the hæmorrhage from the stigmata, which would need frequent

renewing by some process or other in order to continue for ten, fifteen, or twenty hours ?¹

How can we suppose that she has played this double part, without ever betraying herself, for nearly five years,² at one time in solitude—yet not a safe solitude, for unexpected visitors might always surprise her³—at another time before the eyes of the public ?

I do not speak only of the number who pressed into the little house as long as it was open to them—their testimony is not without value in my eyes, but science raises the objection that simple guileless souls, naturally fond of the marvellous, are easily deceived—I speak of men who

¹ Some medical men, recognising the impossibility of explaining at once, by the hypothesis of fraud, both phenomena, have adopted a middle course: they have admitted that the ecstasy of Louise Lateau is a real and true phenomenon (of which, however, they reserve their explanation), and they bring the charge of fraud against the stigmatisation only. But mark this, they embarrass themselves with a still greater difficulty. In fact, they are obliged to admit the coexistence of a malady and a fraud. They must suppose that every Friday, at a fixed hour, the young girl has at her command a malady, as they call the ecstasy, and that to it she adds, as complement, a fraud, as they name the stigmata.

² Let us remember that the stigmata began on the 24th of April 1868, and the ecstasy on July 17th of the same year.

³ On the 11th of February 1870 I was passing across the parish of Bois d'Haine quite unexpectedly. As it happened to be a Friday, I wished to see Louise again. I knocked at the little house, which was at once opened to me; and crossing without delay the common room, where her two sisters were at work, I went straight into her little room. It was a quarter to four o'clock. The ecstasica was quite alone; she was prostrate on the ground, her arms extended in form of a cross, insensible, and completely unconscious of anything going on around her. The pieces of linen which had been wrapped round her bleeding stigmata were still there. I counted nine of them. The blood which had streamed from her forehead had dried, and formed various figures, some extending to her cheek; the small white head-dress which covered her head was marked with irregular red stains, forming a half circle, which completed the forehead's bleeding crown. I took off the head-dress, and saw that the blood had flowed from points very numerous, and near together, describing around the head a complete circle, which passed across the middle of the forehead. The feet had not bled. In the right hand the flow of blood had just ceased; the clots were still soft; in the left hand a thread of blood continued to escape from the dorsal, as well as from the palmar stigma. After having examined these different points, I left the cottage. I need not say that Louise was not conscious of my visit.

have devoted their whole lives to studying the mysteries of man's bodily and moral life; of more than 100 medical men and of more than 200 theologians who have come to study these extraordinary facts.⁴

For—and this should be well understood—in spite of the instinctive repugnance of delicacy, Louise has, from the commencement of the phenomena, submitted herself out of obedience to the inquiries and the trials required of her. The object of a curiosity always fatiguing, often indiscreet, sometimes even malicious, she may almost be said to have lost the right of possession of herself; she has become as it were public property, belonging to all in common, a thing that every one can examine according to his own fancy.

These thoughts occur spontaneously to the mind of all those who have visited the little house at Bois d'Haine; they receive I know not what of more convincing reassuring reality from the sight of the places and persons. Thus all the visitors carry away the conviction that the phenomena of which they have been the witnesses are real and genuine. I might perhaps cease at this point. But considering, on the one hand, that the greater number of my readers have not been witnesses of the facts, and on the other that the genuine character of the phenomena is the principal point of discussion—for it would be more than useless, it would be absurd, to discuss them if they were nothing but the wicked jest of a woman—I think it necessary to lay stress on the hypothesis of fraud, and examine it most completely.

Proofs of the truth of facts are of two kinds; the one set are moral proofs, the other physical.

We will begin with proofs of the moral order.

It must be admitted that Louise Lateau herself is the best witness to the truth of the phenomena seen in her. Let anybody watch closely the obscure life of this brave but humble girl, who lives so meanly, avoids notoriety, and

⁴ I need scarcely add here that since I wrote these lines (1870) a great number of doctors and theologians have continued to verify the facts of Bois d'Haine.—*Note in the second edition.*

refuses presents ; who has given herself up, since her childhood, to a very slavery, in order to help her mother, and who still finds time to tend the sick and lay out the dead ; who prays with the fervour of an anchorite and the simplicity of a child, and yet gives but little time to the most solemn practices of piety for fear of encroaching upon her hours of work. Such a life carries with it a conviction of truth sufficient to overcome all prejudice, and sink to the very depths of the soul. Neither is this impression confined to this or that individual, it is general.

In her own neighbourhood everybody calls her '*the good Louise*;' in the world at large even the few writers who, in the wonderful events at Bois d'Haine have sought an opportunity of traducing religion and its ministers, have spared the reputation of the girl herself.

But let us enter more particularly into this moral analysis.

All will admit that some great motive must be necessary in order to induce Louise to play every Friday this ungrateful and thankless part ; and one can only imagine three motives strong enough to urge her on to such a strange course of action. It must be either the desire of gain, or a morbid vanity such as has sometimes been observed in the medical history of women ; or lastly, an absurd but still conceivable sort of fanaticism ; for it sometimes happens that excited imaginations get so far wrong as to imagine that they may make lying and deceit conducive to the glory of God and the honour of His Church.

We will examine each of these hypotheses.

First. Behind all this, is there not some question of money ?

The answer is simple. If the family of Lateau had wished, I do not say to make a disgraceful speculation of, but to profit, even perhaps legitimately, by the great impression produced by these extraordinary facts, they might before this have been quite rich. Yet every one knows that they live in the same state of extreme poverty. Then, if one asks the many visitors who have entered the little house

at Bois d'Haine, they will declare that those who have wished to offer money—not to Louise, for no one has been bold enough to do this, but to her mother or her sisters—have met invariably with a refusal, which had in it a tinge of injured pride.⁵

Secondly. If Louise has no desire for money, may she not still be under the influence of a feeling even more powerful in women than avarice—namely, vanity? It is not an uncommon thing, even in the lowest walks of life, to meet women who seem to be under an absolute necessity to show off, to make themselves interesting, to draw public attention to their persons. But everything combines to make us reject this supposition. I might allege first of all that straightforwardness which is the very essence of Louise's character, and the extreme reserve that she shows, even towards those who have obtained authority to ask her questions, and to whom she has been commanded to reply.

This reserve never leaves her. Let me recall once more some few particulars of her life. When the stigmata first appeared on the side, and showed themselves the Friday following in her feet, Louise said not a word, even to her mother and sisters; she wiped up the blood with pieces of

⁵ I could bring forward many facts to prove this assertion. I choose a most simple one, because it happened with closed doors, as it were, and therefore could not have been a ruse intended to impress the public. At one time, when hardly any visits were permitted, except to the doctors and some few ecclesiastics, a young man from Châtelet, after having tried in vain to obtain an entrance into the house, had passed the greater part of the day wandering about in the neighbourhood, waiting for a favourable opportunity. Towards the evening, one of the visitors who had been admitted begged one of the sisters of Louise to let in for a few minutes the stranger who had shown himself so patient, and who, besides, was just then alone. She consented, and went to open the door for him. The young man, however, had devised, as he thought, a means of getting into the house; and believing that money was a universal pass-key which opens most doors, thought he would apply it on this occasion. The moment that the young woman opened the door, he, not doubting that it was opened for himself, slipped a twenty-franc piece into her hand. The girl, for a moment surprised, simply gave him back the money, and said, 'I was going to let you in, sir, but no one enters here for money.' And she shut the door in his face. This fact, of which Louise's sister has never spoken, was related by the gentleman himself who had been shut out.

linen, which she burned in the evening without the knowledge of her family.

For some time after she had received the marks, and before she had been ordered to allow herself to be examined, she always refused, gently but firmly, to show her hands on a Friday. Even now, when she is recalled from her ecstasy, or it ceases spontaneously, her first care is to cover her bleeding hands, if they have been exposed by the curious. This she does without flurry or affectation, actuated by a sort of instinct of modesty. During the week, when she is at work with her sisters or her friends, no mention is ever made in the familiar intercourse of ordinary life, not only of the ecstasy and stigmata, but not even of the visits that have crowded the little house on the previous Friday. I think I have mentioned before how much the mother is annoyed by these visits, and how in moments of irritation the poor soul vents her ill-temper both on neighbours and strangers. It will be asked, however, whether Louise shares in this feeling.

She has received many visits from distinguished persons, at which visits it has so happened that I have been present. Would you know the only benefit that her pretended vanity has sought to draw from them? Only this: permission to retire into obscurity and to be kept from the public gaze on a Friday.⁶ Well, I appeal to the good faith of my readers. Are these the tactics which vanity would have used?

If any other proofs are needed of the sincerity of Louise and her family when they beg so earnestly for quietness and peace, I will relate a fact which of itself convinced me

⁶ I think I shall hardly be guilty of any indiscretion in citing my authority for this assertion. In the month of August 1868 the Archbishop of Malines saw Louise Lateau, in order, as he said, to find out what there was in the depths of this soul. After a long examination, he said to the girl, 'Have you nothing to ask me?' 'Yes, my lord; what shall I do to hide myself?' The Good Friday of the following year she received a visit from her own venerable Bishop; and I can testify that the only favour that the mother and the daughters asked—and this they asked with the greatest earnestness—was the discontinuance of the visits of the public. Everybody knows that this request was subsequently complied with.

of it, and which will probably convince many of my readers also. At one time, when the curious, and especially doctors, were still admitted without much difficulty to see Louise, in January 1869, her mother, very much put out by these continual visits, had asked to have at least one week of quietness; and it had been agreed that on the Friday following nobody should be admitted into the house. Now it happened that on this particular day, the Princess E. de Cr—— presented herself to see the stigmata. She found the door fastened. She begged for admission for a long time; told her name and showed her letters of recommendation. All her entreaties were refused with respectful politeness, but unshakeable firmness, and she had to return to R—— without having seen the girl at all. An unforeseen occurrence, such as often happens in a doctor's life, had brought me this particular Friday into the neighbourhood of Bois d'Haine. It had been agreed that I should not come on this day any more than the rest of the world. But the opportunity was a good one, and my curiosity was excited by the thought that, as nobody was to be admitted at all, I should catch Louise altogether unprepared. I went to the house an hour after the Princess of Cr——. I had never been refused admission, and I was allowed to enter at once without difficulty. This is what I saw: not only the customary phenomena, just the same in solitude as in the presence of a crowd, the ecstasy in its perfection, and the wounds bleeding profusely, but there was, besides, an extraordinary fact, which only then showed itself for the second time, which I had never before seen, and which but very few persons had been witnesses of on its first appearance. I allude to the crown of thorns on the forehead.⁷ People don't play, as a rule, to empty benches. Is it not evident that if the affair had been planned and prepared—and, above all, if this new scene of the crown of thorns had been added—the public would not have been

⁷ Five or six of the small punctures were bleeding still; over others the blood had clotted. Rosine Lateau told me that the bleeding at the head was going on before she got up in the morning.

shut out? Supposing the thing to have been planned, was not the arrival of this witness, the Princess de Cr——, an unexpected piece of good fortune, coming as she did from the very highest rank of society to see these wonderful things, and likely to repeat them afterwards to the fashionable world?^s

I need not, I think, dwell upon the hypothesis of pious fraud, inspired by some kind of fanaticism. In showing how humble and sincere the girl's piety is, and in proving that, far from seeking to show herself off in public, she strives by every means in her power to escape the notice of the world, I have overthrown this supposition beforehand, and have shown its untenableness.

These purely moral considerations will not perhaps suffice for certain positive and mathematical minds, who wish for physical and, as it were, palpable demonstration. We come then next to this order of proofs.

To produce the hæmorrhage of the stigmata some operation is necessary. To what manœuvre could Louise resort? There can be no question of pricking or cutting instruments; it is clear that such instruments could only puncture or cut, and in this case there are what are neither punctures nor cuts—there are vesicles. One writer, certainly not a physician nor a surgeon, has asserted somewhere that the phenomenon was simply from an application of cupping-glasses. Professional men know that it is difficult, and often impossible, to make a glass 'take' on the bony and unequal surface of the hands and feet; and if this little operation were practicable, it would still, for the flow of blood, be necessary to open the vessels by some means—incision, vesication, &c.; further, when the cupping-glass was taken off, the bleeding would stop.

^s The sequel of this story is worth telling. The Princess of Cr——, being admitted with others on a subsequent occasion, wished to draw the ethereal figure of the ecstatic girl during her state of unconsciousness. She draws beautifully, and had begun to cut the pencil. One of the sisters came up to her, and said with great earnestness, 'Madam, you must not do that; we have promised our sister never to let her portrait be taken.' It was not begun.

Caustic also has been mentioned. I must therefore examine this hypothesis, however weak it be. Caustic, of whatever kind, destroys a part, if not the whole, of the thickness of the skin; the eschar it produces does not separate till after a period of from five to twenty days. Then the bared surface of the derma does not bleed; or if, under exceptional circumstances, the blood does escape from it, it very soon stops. Finally, caustic, if applied only once, causes some loss of substance. This can only be repaired by a process of granulation, which lasts several days, and necessarily leaves an indelible, often a disfiguring, scar. And observe, I am speaking of only one application of caustic. What would be the case, then, if it required to be repeated more than two hundred times on each of the nine stigmata? Such are, briefly, the phenomena of cauterisation. What do we find in the case of Louise Lateau? Need we repeat? A vesicle instead of an eschar; no loss of substance; a hæmorrhage⁹ which lasts half a day, sometimes a whole day; an immediate healing without scar, even after hundreds of repetitions of the phenomenon. An hypothesis less evidently false would be that of a blistering agent, which Louise might apply to the nine stigmatic parts where vesicles are observed.¹⁰ Yet this supposition does not bear attentive examination any better than the former. I may first observe that I have always carefully looked for the evidences often left by blistering agents. Thus, I have never detected the characteristic smell of cantharides or ammonia; by the lens I have never found any of those little spangles of cantharides which are so easily to be recognised. Litmus paper has given no evi-

⁹ We are speaking here in medical language. It may not, however, be out of place to remark that, medically, we understand by hæmorrhage the escape of any quantity of blood from the vessels; whilst in ordinary language a large stream of blood is generally meant.

¹⁰ By blistering agents we understand irritant substances, which have the property of causing a special kind of inflammation of the skin, and of producing on the derma an exudation of serous fluid, which raises up the epidermis into a vesicle. Cantharides is the best known; then liquor ammoniæ, daphne, euphorbium, &c.

dence of the application of acids. Further, the evolution of the phenomena is not like the result of the application of blisters. The development of the stigmata is not simultaneous, but successive. I have often seen, on the Thursday evening, three or four vesicles fully developed, whilst on the other places there was no sign; and yet, on the following morning, the other vesicles appeared and ruptured in turn. On Friday, the 10th September 1868, a time when the family generally refused admittance to visitors, I went down to Bois d'Haine unexpectedly. Louise was alone, absorbed in her usual ecstasy; the stigmata on both surfaces of the hands were bleeding copiously. To judge by the linen near her, all red with dried blood, there could be no doubt that the hæmorrhage had commenced, as usual, in the night. Well, the front of the feet was then only in the vesicular stage. Before my eyes, whilst she was motionless in ecstasy, without my having left her for a moment, the vesicle of the left foot ruptured at half-past twelve, that of the right foot at a quarter past one, and the two stigmata began to bleed abundantly.

Observe also, that the stigmatic vesicle is not surrounded by that inflamed areola always seen round blistered surfaces. To conclude with an important observation: when the vesicle of a blister of anykind is taken away, the bare surface of the derma does not bleed. I know that some objection may still be raised. It may be said—the blood of this young person is impoverished, is deficient in fibrine; it will be sure to flow if the epidermis is removed. The examination of the characters of the blood, as previously detailed, and also the general condition of the young person, are enough to dispose of this objection. However, we have made two experiments which would of themselves be enough to set aside the hypothesis of any kind of fraud whatever. I proceed to relate them in detail.

On Friday, November 27, 1868, I went to the house of the widow Lateau. We expected, on that day, two physicians well versed in the study of the physiology and pathology of the nervous system. I proposed to make with them

some experiments which should serve as a kind of counter-proof of the facts of Bois d'Haine. They were prevented at the last moment from keeping the appointment. Fortunately there were there every week a certain number of medical men, and I was able to make what I considered the most important experiment in the presence of two honourably known practitioners.¹¹

They were as follows: As I have often observed, the phenomena of the stigmatisation in the case of Louise Lateau may be summed up in a few words—the epidermis is raised in a vesicle full of serous fluid; this vesicle breaks and the bared derma bleeds for some time. The point was to produce artificially the same set of phenomena. On that day the blood was flowing copiously from all the stigmata; on the back of the left hand in particular, the true skin, bared to the extent of nearly an inch, bled without cessation. Over a round surface of about the same size, and by the side of the bleeding stigma, I applied liquor ammoniæ.¹² I was careful to leave a little border of healthy skin, that the two wounds might not touch at their edges, and that their phenomena might remain quite distinct.

After twelve minutes' application of the ammonia a good circular vesicle was formed, full of transparent serous fluid. I need not say that this did not break of itself. I divided the epidermis and removed the pieces, so as to bare the surface of true skin within the space mentioned.¹³ Thus side by side were two wounds, in the same tissues, traversed by the same vessels, of the same size, and the same anatomical formation. We observed them carefully; the surface of the stigma continued to bleed, and when I left the young person, at two o'clock in the afternoon, the flow continued, and there was no indication of its ceasing. From the artificial stigma there did not come one single drop of blood: I watched it

¹¹ Dr. Lecrinier de Fayt and Dr. Séverin de Braine l'Alleud.

¹² I need scarcely say that I used a cup containing cotton-wool soaked in the blistering liquid.

¹³ Observe, in passing, that during this application, which is acutely painful, and which lasted twelve minutes, the face did not indicate the slightest sensation, and no reflex movement was produced.

for two hours and a half. There oozed from it a colourless serous fluid for about half an hour, then it dried up. I rubbed it with a coarse cloth; the fluid which this took up during the friction was slightly tinged with pink, but when I stopped rubbing there did not flow a single drop of blood.¹⁴

The second experiment, perhaps still more decisive, might be called the glove test. On Wednesday, February 3, 1869, at four o'clock in the afternoon, Dr. Lecrinier de Fayt, M. Niels, curé of Bois d'Haine, and M. Henri Bussin arrived at the house of Louise Lateau. They brought with them leather gloves, thick, strong, well sewn. After ascertaining that both hands were in their normal condition, and especially that there was no unusual redness, no sign of vesicle, the young person was asked to put on the gloves. They fitted exactly. A stout ribbon fastened round the base of each glove served to bind it closely round the wrist. The glove having been put on, and the ribbon passed five times round the wrist, so as to leave no space between the glove and the limb, the two ends were tied in a double knot and cut off one inch from it. The ends of the knot were then covered with melted sealing-wax, which was stamped on either side with a special seal. To prevent the seals from being broken by any accidental blow or friction, they were enclosed in little linen bags. The arrangement was the same for both hands, except that the ends of the two first fingers of the right glove were cut, so as to uncover the ends of the thumb and the first finger, in order that Louise might go on with her work of sewing.

On the following Friday, before seven in the morning, I was at the little house at Bois d'Haine. I met there, as agreed, the witnesses who had applied the gloves and also Monsignor Ponceau, vicar-general of the diocese of Tournay, and two Belgian doctors, Dr. Moulaert of Bruges and Dr. Musely of Deynze. Each one of us carefully examined the

¹⁴ It is as well to record that the artificial vesicle was surrounded by an inflamed areola, which does not appear round the stigmata. When I saw the young person on the following Friday, the little wound produced by the ammonia was still covered with a scab.

apparatus, ascertained the perfect integrity of the seals, the ribbon, and the gloves; and made sure that it was impossible to slip any instrument over the front or the back of the hands. These points having been determined, I cut the ribbons and removed the gloves. They were quite full of blood: the hands were steeped in it. After having washed them in warm water, we found the stigmata in the same state as on other Fridays: on the palm, as well as on the back of each hand, the epidermis was raised; it was torn and had left bare the surface of the true skin; each of the stigmata continued to bleed as usual. With regard to the feet, which had not been subjected to any special precaution, the right was bleeding copiously, the left was dry. It is perhaps not impossible to make an objection, a very far-fetched one, no doubt, but one which we must not pass over. It may be said, ' Louise learnt, through some one's indiscretion, the experiment that was intended, and on Wednesday, before the coming of the witnesses, she applied to her hands the unknown agent which causes the formation of the vesicle and afterwards the hæmorrhage. She reasoned, "The vesicle will form too soon, the blood will flow before the usual day, but the glove will hide both vesicle and blood, and appearances will be saved." '

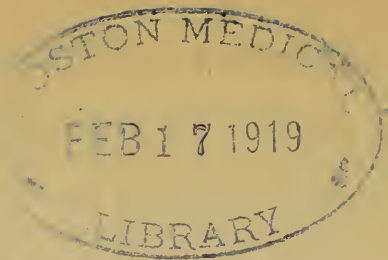
An experiment made under other conditions, and with other witnesses, answers this objection: the gloves were fastened on, on a Tuesday, with the same excess of precautions, and removed for a few moments twenty-four hours afterwards; the perfect integrity of both sides of the hands was ascertained, and then the gloves replaced. On Friday morning the bleeding occurred from the stigmata of each hand as copiously as usual. These considerations and these experiments warrant me in concluding that there is not the slightest possibility of fraud producing the hæmorrhage of the stigmata.

It would be easy to demonstrate by similar (physical) proofs that the *ecstasy* of Louise Lateau cannot be feigned. Let it suffice to call to mind the repeated tests, and especially the electric stimulation, to which I subjected her in

order to satisfy myself of the insensibility which, from a physiological point of view, is the characteristic of this state. There is no physiologist who does not recognise, with me, that unless the loss of sensation were complete, the organism would, by a quivering or some other reflex movement, answer to the painful irritation of electricity.

The facts of Bois d'Haine are therefore genuine and true.

In the presence of the moral, the physiological, and the material impossibilities which I have pointed out, the hypothesis of fraud must be absolutely rejected.



PART IV.

MEDICAL INQUIRY CONCERNING THESE FACTS.

WE have now related, in a few words, the parentage and the life of Louise Lateau. We have given the reader a picture of her personally. We then described the phenomena which, during the last five years, have been reproduced every Friday at Bois d'Haine. The truthfulness of them we hope also to have established. Still, however, our work is merely sketched out. On these extraordinary facts people ask us to throw all the light that medicine can gather together.

To fulfil this object rightly, we must not forget that medicine is both an inductive science and a science of observation. On the one side, it collects facts about disease, it recognises their character, it classifies them, by analogy; just as one would classify objects of natural history. On the other side, it studies the laws of life, and interprets those facts by these laws. In order to elucidate the phenomena of Bois d'Haine as much as possible, they must be studied by us from this double point of view.

Beginning from the standpoint of pure observation, let us examine the character of these facts, and then compare them with analogous cases recorded by science. Should we meet with a malady presenting essentially the same characteristics as the facts of Bois d'Haine, we might justly conclude: Here is the pathological species to which belong the phenomena of which you have sought the interpretation. There our work would end. But it is desirable, although not necessary, to have a complete scientific notion of a disease, in order to assign to it its proper place in our

systematic knowledge.¹ In the natural sciences there exists a host of facts the truth of which is well authenticated, and which are incontestably of a purely natural character, yet still are but very imperfectly understood.

This is, then, the first research which we have to make. It is by no means so easy as would appear at first sight. It may be true that the greater part of the maladies to which our nature is subject are in our day well known, and regularly classified by science, but we must acknowledge that medical men have not made known and duly labelled all possible maladies. To complete therefore the task we have undertaken, we must search for cases analogous to the facts of Bois d'Haine, and that not merely among diseases clearly defined and duly allocated by science, which may be designated as *classical diseases*, but also among exceptional cases, scattered up and down, like rough material, among the collections of medicine, cases which hitherto could not be classified definitively, and which, with Fournier, we may call '*rare cases*.'²

Therefore, both from among classical maladies as also from among these rare cases, we must search for either some one disease which presents the symptoms both of stigmatisation and of ecstasy, or for two distinct diseases, the one characterised by a flowing of blood analogous to stigmatic hæmorrhage, the other by nervous phenomena resembling ecstasy. In this last case, we should have, moreover, to admit a series of suppositions most singular indeed. In fact, we must suppose that these two maladies make their appearance together, on the same person; that they are periodical,

¹ The complete notion of a disease includes the following elements :

- α. The causes whence it springs: etiology.
- β. The mode of action of these causes; or, in other words, the way in which they produce the disease: pathognomy.
- γ. The lesion of the organs, which anatomically characterises the disease: pathological anatomy.
- δ. The functional derangement or symptoms which make it manifest: symptomatology.

² Fournier, in his *Dictionnaire des Sciences Médicales*, has made a very large and most curious collection of cases of extraordinary diseases, under the head of *Cas rares*, t. iv. p. 135 et seq.

both one and the other ; and that their access as well as their intermittence coincide identically, with unalterable exactitude.

Before beginning this task, let me avow candidly that I have met with a certain number of facts not merely analogous but almost identical with the phenomena to be seen at Bois d'Haine. These facts have not been met with by me in the records of medicine ; or if there, they were there second-hand. I have taken them from the annals of religion. From St. Francis of Assisi, who died in 1226, down to Maria Mörl, our own contemporary, we may easily count up sixty persons, both men and women, who have had bleeding stigmata, sometimes on the forehead, sometimes at the side ; in others, the hands or the feet ; in some at all these places at once.³ Very many of these persons were in ecstasy at the same time. Perhaps we shall be straightway met with this objection : there is the very species of malady to which belong the phenomena for the origin of which you are searching. But this would be to settle the question by the question itself. For what is really the object of this research ? It is to discover whether the phenomena presented by Louise Lateau are natural pathological facts ; and in order to answer this in the affirmative, are we simply and solely to cite, from writings on Christian mysticism, instances which are themselves met with the self-same question ?

To give an example which will make this false reasoning more evident. The Holy Scriptures give us (if I mistake not) nine several examples of resurrection from the dead.⁴ Now, in point of logic, what should we say of a

³ To facilitate to readers whose knowledge of Catholic religious literature is limited the means of comparing these facts with those which we are here analysing, I will give in the Appendix some examples from history of stigmatisations (VI.).

⁴ *a.* The son of the widow of Sarephta, raised to life by the Prophet Elias, 3 Kings xvii. 22.

B. The son of the Sunamite by Elisens (4 Kings iv. 34) ; and the young man restored to life by the touch of the bones of this prophet, 4 Kings xiii. 21.

γ. The raising of Jairus's daughter, of the son of the widow of Nain, and of Lazarus. by our Blessed Lord.

δ. The resurrection of our Saviour Himself.

ε. The raising of Tabitha [Dorcas] by St. Peter, Acts ix. 40.

ζ. That of Eutychus by St. Paul, Acts xx. 9.

critic who would seek to explain the resurrection of Lazarus by such reasoning as this: The resurrection of Lazarus is evidently a fact in the natural order: the proof of this is, because we find in Holy Scripture eight analogous cases?⁵

The facts of stigmatisation and of ecstasy must form a group by themselves. The object of this research is precisely this order of facts. It is not my duty to discuss every instance of them. But it is evident that if I am able to throw some light on what is happening at Bois d'Haine, this light will be also cast on all the existing phenomena of the same nature.

It is therefore not within the region of Christian mysticism but of pathology that we should look for facts to assist us in the rational interpretation of the phenomena of the case of Louise Lateau.

In the wide region of internal pathology, I have not discovered one disease which includes the symptoms of both stigmata and ecstasy. I am obliged therefore to accept, though provisionally and reserving points for discussion later, the hypothesis of two distinct diseases progressing together; and I will pass in review the maladies characterised by spontaneous effusion of blood, and those whose principal symptoms are of a nervous character somewhat like the phenomena of the ecstasy.

But, as already said, medicine is not only a science of observation but of induction. If we cannot place the facts of Bois d'Haine in the category of recognised diseases or rare pathological cases, we must then investigate the facts in themselves, and ask if they can be interpreted by the physiology either of health or of disease.⁶

Having now explained the scope and plan of our argument, we can pass to details, and commence with the study of stigmatisation.

⁵ The reader will, I hope, readily see that it never entered my mind to think of comparing these visible acts of Divine power with the simple facts which are here under discussion. I use merely a mode of argument—a demonstration—called by logicians the argument of *substitution*.

⁶ Physiology is, to speak in general terms, that branch of medicine which has for its object the study of the laws of life.

I.

A STUDY OF STIGMATISATION FROM A MEDICAL POINT OF VIEW.

As already laid down, we shall have to compare the facts of Bois d'Haine with recognised diseases or with rare cases which may show some analogy with them, and we shall have also to make a physiological study of those facts.

§ 1. *Comparison of the facts of Bois d'Haine with the known diseases which offer any analogy to them.*

The essential character of certain diseases is a tendency to hæmorrhage: the blood very readily escapes from the vessels, whether these give way from injury or spontaneously. The organic conditions on which this tendency depends have not been precisely determined by pathologists.⁷

Some of them are connected with the vessels themselves; either their walls, naturally weak or become so from impaired nutrition, give way without resistance, or else, from impaired nerve-supply, they become paralysed and distended till they burst from the pressure of the blood. Other causes depend upon the state of the blood itself, which, having lost a certain proportion of its fibrine, has become more fluid, less coagulable; it has a strong tendency to escape from its natural channels, and especially to continue flowing when an accidental wound has started it; or, again, it contains an excess of white corpuscles (Virchow), an anatomical condition which, in some at present unexplained manner, often leads to extravasation of blood. However it be, spontaneous hæmorrhage, which we specially refer to at present,

⁷ For the production of hæmorrhage—*i. e.* the effusion of true blood, consisting of plasma and corpuscles—the rupture of the containing vessel is a necessary condition. We shall, later on, express our opinion on the possibility of the transudation of blood-corpuscles through the unbroken wall of the vessels. Now this rupture may be either from some external cause, as a cut or bruise, when the hæmorrhage is called *traumatic* (τραυμα, a wound), or it may occur without external cause in certain impaired states of health; the hæmorrhage then is called spontaneous.

has certain invariable characteristics which it is important to state.

And, first, the cause of it is continuous ; until the cure or the death of the patient, it is always present and acting in the system. Whence it follows that this kind of hæmorrhage is more or less constant ; it may have remissions and relapses, but they are never regular in their recurrence.

This characteristic distinguishes clearly these losses of blood from those of the stigmata which recur every Friday so regularly, and never on any other day.

A second and equally important characteristic is that the diseases which dispose to hæmorrhage are *general* diseases ; the bleeding will occur wherever there are vessels and blood, that is, in every part of the body. The bleeding from the stigmata, on the contrary, occurs always at the same place on the hands, the feet, the side, and the head—never on any other part of the body. Moreover, though the tendency of spontaneous hæmorrhage is to be general, it occurs more readily in some parts than in others. We may presume, *à priori*, that the blood will tend to escape, especially from the capillaries, and particularly so where their walls are least supported by surrounding tissues.⁸

Facts confirm this supposition of theory. Thus, in hæmorrhagic diseases, such as scorbutus and purpura, the blood generally comes from the mouth, the nostrils, the bronchi, the stomach, or the intestinal tract, in all which parts the capillaries, being very superficial, are but little supported by the soft tissue of the mucous membrane ; or else, for the same anatomical reason, the blood escapes into

⁸ I owe some information here to readers who have not studied anatomy. There are in the human body three kinds of blood-vessels : the *arteries*, which pass from the heart, and convey blood to all parts of the body ; the *veins*, which convey the blood back to the heart from the different organs ; and the *capillaries*, small vessels through which the blood passes on its way from the arteries to the veins. The arteries have thick tough walls, consisting of three coats. The veins also have three coats, but are much less strong than the arteries. The characters of the capillaries must delay us a moment : they are very fine tubes, with a diameter of from $\frac{1}{3500}$ th to $\frac{1}{2000}$ th of an inch, and extremely thin walls. According to the latest researches, they appear to be formed of flattened cells, joined

the cellular tissue which fills the interstices of organs—or, lastly, into the true skin.⁹

Spontaneous hæmorrhages occur, on the contrary, but very seldom indeed in those parts where the capillaries are, as it were, firmly set in dense tissues which support their walls. Thus we never see the blood come from the palms of the hand or soles of the feet; we may even lay it down that spontaneous hæmorrhage *never* occurs on the surface of the skin in any part whatever.

The upper part of the derma or true skin consists of dense tissue, which supports the capillaries; and, moreover, the epidermis is a barrier, which the blood does not easily pass through. Need we observe that, in these respects, the hæmorrhage of disease is the complete antithesis of that of the stigmata? These latter appear precisely in the places where the former never show themselves, viz. on the outside of the skin, and especially on the palms of the hands and the soles of the feet; and they never occur in those parts where the bleeding of disease specially tends to show itself, viz. the mucous membrane of the nostrils, the bronchi, and the stomach.

Moreover, it is well to observe that whilst the stigmatic hæmorrhages of Louise last for half a day or more, ordinary capillary hæmorrhage very readily ceases. 'The hæmorrhage least to be feared,' says Weber, 'is that which comes

at their edges; these probably rest on an excessively fine *membrana propria* (Chizonszewski, 'Ueber die Feinere Structure der Blut Capillaren,' *Archiv für Patholog. Anat.*, von Virchow, Jan. 1866, p. 129). Owing to their extreme thinness, the capillaries give way much more easily than the arteries or veins; hence they are the usual source of the bleeding in the hæmorrhagic constitution. Observe, that the blood is not only kept within these vessels by these walls, but also, and principally, by the support of the tissues which they traverse. If these tissues are firm and close, they offer much resistance to the rupture of capillaries and occurrence of hæmorrhage; if, on the contrary, they are lax and yielding, they do not support the capillary walls, and readily permit their giving way.

⁹ The cellular tissue is composed of slender soft transparent filaments which make up a sort of wadding placed between different organs, or within their substance. The filaments may be either condensed into bands, to form the tendons of muscles, or expanded into membranes which surround the viscera.

from healthy capillaries. When the surrounding tissues contract, the capillaries are compressed, and the coagulation of the blood is scarcely required in order to stop the flow. As the skin is very rich in contractile tissue, these hæmorrhages stop much more readily than those of mucous membranes which are less provided with contractile elements.¹⁰

These general considerations will save me from certain repetitions in the review of special hæmorrhagic diseases, to which we now proceed. Those which, in some of their appearances, may offer some kind of resemblance to the stigmata are pemphigus, purpura, scorbutus, leukhæmia, chlorosis, hæmatidrosis, and hæmophilia.

The stigma, in its first stage, that of the vesicle or bulla, somewhat resembles *pemphigus*. Pemphigus is, in fact, characterised by the appearance on the skin, in different and various parts, of bullæ or large vesicles, separate from each other, which grow quickly larger, and become filled with a serous fluid like that of a blister; this eruption is accompanied with a more or less feverish condition. The vesicles reach their full development in three or four days, when they break and leave bare the true skin; this secretes, for several days, a sero-mucous fluid, without any trace of blood, then it dries up and cicatrises; so that if there be no fresh crop of vesicles, healing takes place in seven or eight days.¹¹

It is evident that pemphigus has nothing in common with the stigmata except the eruption of vesicles. Now, it is needless to recall the fact that in the case of Louise Lateau the vesicles develop only and always in the same places; that no febrile reaction accompanies them; that their development, rupture, and healing occupy only thirty-six hours; that the bared skin not only exudes serous fluid, but becomes the seat of a flow of blood for several hours.

¹⁰ O. Weber, *Die Gewebskrankungen im Allgemeinen und ihre Rückwirkung auf den Gesamtorganismus*, p. 124.

¹¹ I know that it is possible that the bared surface of the skin may begin to bleed after the rupture of the vesicles of pemphigus, and hence there is a variety which may be called hæmorrhagic; but then it must be complicated with the hæmorrhagic constitution, or, in other words, be accompanied with one of the true hæmorrhagic diseases discussed later on.

We shall not take much time over the description of *purpura* or *purpura hæmorrhagica*; its character is completely distinct from that of the stigmata. It is distinguished, in fact, by small hæmorrhages which occur within the organs, and especially in the thickness of the skin and mucous membranes. The blood thus extravasated does not escape outside the skin; it forms spots of different shapes, from the small round stains called petechiæ to the large mottled irregular patches called ecchymoses. These patches present successively, as the blood is reabsorbed, shades of dark blue, green, and yellow. One eruption of *purpura* marks the patient with a tattooing which does not disappear in less than fifteen days. If we add that bleeding commonly occurs from the nostrils, the mouth, and the stomach, it will be easily understood that something more than a strong wish is required in order to find some points of resemblance between this disease and the bleeding of the stigmata.

Nor shall I delay over *scorbutus*. It is true that the subject of it may lose blood from any part; but what resemblance could be found between the bearer of the stigmata and the scorbutic patient with ulcerated and fetid mouth, the mottled ecchymoses of his skin, the bleedings from the nose, the gums, the intestines?¹²

The disease called *leukhæmia* or *leucocythæmia*¹³ is a recent addition to pathology; but, thanks to the labours of its illustrious 'patron,'¹⁴ it is already better known than many maladies whose origin is lost in antiquity. *Leukhæmia* is distinguished anatomically by a great increase in number of the white corpuscles of the blood and a proportional diminution of the red. We have already had occasion to observe, that in the normal state the blood contains only about one white

¹² Observe, once more, that the blood, we may say, never escapes outside the skin, except in the case of an accidental wound. It is retained in the thick part of the skin.

¹³ *Leukhæmia*, from *λευκος*, white, and *αἷμα*, blood; *leucocythæmia*, from *λευκος*, white, *κυτος*, cell, and *αἷμα*, blood.

¹⁴ Professor Virchow of Berlin, whose works on this disease have become classical.

corpuscle to three or four hundred of the red. In leukaemia the number of the white corpuscles rises to a tenth part, a fifth, or even to half of the number of the red. This disease is accompanied in most cases with a hæmorrhagic constitution: the patient loses blood from different parts, principally from the nostrils, less often from the intestinal tract, never from the skin, though effusions may occur in its thickness. Add the increased size of the spleen, which is often enormous; the dropsies, which are not long in appearing; the waxy colour of the skin; the microscopical examination of the blood, which, instead of showing a few white corpuscles, lost as it were in the mass of red ones, shows them in almost equal numbers,—and you will have a portrait altogether different from that presented by Louise, fresh-coloured, ruddy, in good health, never losing blood except at those points where leucocythæmic patients never do, and whose blood, when examined by the microscope, presents a perfectly normal composition.

Another disorder of the blood common especially amongst young women—*chlorosis*—need not detain us in this place, for two very sufficient reasons; the first is, that Louise Lateau is not chlorotic; the second, that hæmorrhage is not one of the symptoms of chlorosis.¹⁵

Hæmatidrosis (*αἷμα*, blood; *ἵδρως*, sweat), or sweat of blood, is the spontaneous effusion of blood at the surface of the skin, whether by the sweat glands or by the sebaceous glands.¹⁶

¹⁵ Chlorosis, a complaint almost peculiar to young females of from twelve to twenty-five years old, is distinguished anatomically by diminution in the number of the red corpuscles, and, according to its symptoms, by the waxy pallor of the skin, the breathlessness, the palpitations, the impaired or capricious appetite, general debility, &c. Trousseau and others have observed sometimes increase of the periodic flow; but no author mentions hæmorrhage from mucous membranes, still less from the skin.

¹⁶ There are in the thickness of the skin two kinds of glands or secretory organs, viz. the sudoriparous or sudoriferous, and the sebaceous. The sudoriparous or sweat-producing glands consist of a membranous cylindrical tube, about one-sixth of a line in diameter. This tube is closed at its inner end, which is hidden in the skin, and open at the other, which is on the surface of the skin, in order to give exit to the perspiration.

The history of this affection has not yet been written, but the cases scattered throughout various authors present a common character which may be considered essential to and distinctive of the disease, and that is, that the blood transudes at the surface of the skin without any visible lesion; the phenomenon could not, in fact, occur otherwise. If it be really a sweat of blood, this must filter into the tube which forms the sweat gland, and discharge itself upon the skin by the open orifice.¹⁷ This appearance constitutes in itself a radical difference between hæmatidrosis and stigmatisation: in the former, the blood oozes from the skin, which remains quite intact; in the latter, vesicles rise, break, and leave bare the true skin, from which the bleeding comes. After this statement, we need not lay stress on the irregularity of the phenomenon and its varying seat in those who are the subjects of hæmatidrosis,—its exact periodicity, and invariable place in the bearer of the stigmata.

We come now to a hæmorrhagic disease more important than those hitherto sketched, viz. *hæmophilia* or *hæmorrhaphilia* (αἷμα, blood; ρέω, to flow; φιλία, friendliness, i. e. disposition to). This singular malady consists in a congenital hæmorrhagic constitution, which shows itself by the extraordinary persistence of bleeding if it occur from a wound, and by a great tendency to spontaneous and very profuse hæmorrhages.

I am obliged to discuss this affection more fully than the others, because it is usual at present to explain by this morbid disposition all the spontaneous hæmorrhages which cannot be accounted for otherwise; hence it has often been put forward in explanation of the facts of Bois d'Haine.

The tube is long, and in order to lodge in the thickness of the true skin, it is rolled up on itself, and forms a little irregularly-rounded mass. These glands are very numerous. Professor Sappey calculates that there are from six to seven hundred thousand over the whole skin. The sebaceous glands which secrete the unctuous material coating the surface of the skin consist of an excretory duct, upon which are grouped four or five little cells, so that the gland, taken altogether, resembles a small bunch of grapes, of which the stem, the stalks, and the fruit would be hollow.

¹⁷ As hæmatidrosis has not been scientifically described in works on pathology, I shall be obliged to cite in the Appendix a sufficient number of instances selected from reliable writers.

Hæmophilia is a modern disease. I do not mean that the disease itself is modern, but that it had not attracted the attention of our predecessors sufficiently to be clearly described by them. Nevertheless, we find traces of it scattered in ancient authors. Albukasis, in the eleventh century, speaks of persons in whom the simplest wounds bled to a fatal extent.¹⁸ A physician of the sixteenth century, Alexander Benedetti, relates the history of a barber at Venice who died of hæmorrhage following a trifling wound.¹⁹ Towards the end of the last century, in 1784, the English physician Fordyce records that in certain families the tendency to hæmorrhages is hereditary.²⁰ From that time the attention of the profession was directed to this subject; and in 1850 Lange, collecting the known cases, recorded the history of 112 families afflicted with this morbid tendency. The number of affected individuals—in German, ‘bluters;’ Anglicè, ‘bleeders’—in these families was 280.²¹ With such a number of cases before us it is possible to trace the essential characteristics of the disease, and the descriptions given by Schoenlein, Hopper, Rokitansky, Grandidier, and Virchow leave little to be desired. We proceed, therefore, to sketch them.

It is generally hereditary: the parents of ‘bleeders’ have almost always suffered themselves in the same manner.

It rarely affects women. Of the 280 cases mentioned by Lange, only 40 were of the female sex, or one to seven males. Most frequently the hæmorrhage occurs in consequence of an external lesion; a puncture from a lancet, the application of a blister, or the extraction of a tooth. Sometimes the hæmorrhage occurs spontaneously, and in that case, according to a law already stated, the blood escapes from the least supported capillaries—most frequently from

¹⁸ *Theoricæ nec non Practicæ Liber*, Augsburg, 1519. Latin translation of Ricius.

¹⁹ *De Omnium a Vertice ad Plantum Morborum*, Padua, 1825.

²⁰ *Fragmenta Chir. et Med.*, London, 1784.

²¹ ‘Statist. Untersuchungen über die Bluterskr.,’ Oppenheim, *Zeitschrift der Ges. Med.*, October 1850.

those of the mucous membranes, very seldom from those of the skin. In the recorded cases it has come from tissues in the following order as to frequency: the mouth, the intestines, the bronchi, the nostrils. As I have already observed, it is only exceptionally that the blood exudes spontaneously from the skin.

Grandidier, in an abstract of 127 cases of (this kind of) hæmorrhage, found that in 122 the blood came from the mucous membranes, and in five only from the skin; in two of these, from the hairy scalp, in the other three from the fingers: and observe, those 'bleeders' who lost blood by the skin did so also by the mucous membranes. In addition to these external losses, hæmorrhages often occur in the interior of the organs, and the skin is mottled with patches of a bluish black. I have not, in any author, met with any case in which the hæmorrhage recurred periodically. A symptom which is peculiar, but constant and characteristic of the affection, is the presence of shooting pains in the joints, and these are often accompanied with more or less swelling. Hæmorrhage occurring in 'bleeders,' whether it be spontaneous or traumatic, is difficult to stop. Fr. Nasse, the author of an excellent monograph on this subject, even asserts that such hæmorrhages never stop of their own accord, and that, unless the patient receive help, he must infallibly die.²² This statement is exaggerated; but all authors agree in stating that the flow of blood, which is always hard to stop, often resists the best treatment.

Thus Grandidier has collected 31 cases of death from spontaneous hæmorrhage,²³ and 83 of death from loss of blood induced by trifling wounds.²⁴ Is it necessary to com-

²² 'Von einer erbl. Nölgung zu tödli. Blutungen,' *Archiv für Med. Erfahrungen*, Von Horn, 1828.

²³ Eleven fatal from bleeding at the nose, three from bleeding from the gums, one from the great toe, &c.

²⁴ Fourteen deaths from bleeding from chapped skin or lips, ten from extraction of a tooth, seven from a bite of the tongue, four from leech-bites, two from a blistered surface, one from a prick when cutting the nails, &c. Of fifty-two cases in which Grandidier could verify dates, five were in their first year, thirty-four between one and seven years old, ten between seven and twenty, three between twenty and thirty.

pare with this picture that of the stigmatisation? The subject of it is a young woman. No member of her family has ever shown any tendency to hæmorrhages; neither has she herself, independently of the stigmata.²⁵ She bleeds every Friday, and on that day only. The blood flows precisely from the part which is never affected in the subjects of hæmophilia, the skin; it never flows as in the hæmorrhages of disease, from the mucous membranes of the nostrils, the bronchi, &c. She has never felt those pains in the joints which constantly accompany hæmophilia. Finally, the bleeding stops of its own accord, and has never lasted beyond the Friday. Such are the resemblances and the differences between hæmorrhagic diseases and stigmatisation.

²⁵ It is important to observe that hæmophilia is a congenital state—*i. e.* it affects the subject of it from the moment of birth—and produces its effect, hæmorrhage, in the earliest periods of life. Thus Grandidier cites eighty-eight cases of death from umbilical hæmorrhage at the very time of birth. Inquiring into the commencement of the losses of blood in sixty-four cases of which he had details, this author ascertained as follows:

Forty-six times in the first year.
 Five " " second year.
 Twice in the third year.
 Twice " fourth year.
 Three times in the fifth year.
 Twice in the sixth year.
 Twice " tenth year.

He found two cases only after the tenth year: the father and son in one family died at the age of twenty-two from nasal and intestinal hæmorrhage.

It would, then, have to be admitted that, by a more than rare exception, Louise, up to her eighteenth year, did not present the least hæmorrhagic tendency. The premature establishment of menstruation in females suffering from hæmophilia has been observed by Grandidier at eight years, by Uhde at thirteen, by Heyfelder at twelve, in families where the age of puberty was generally later. Now we have seen that this did not occur in the case of Louise till the age of eighteen. Observe also that this flow, which has been constantly observed to be very profuse and prolonged in the 'bleeders,' is, in the bearer of the stigmata, quite within the ordinary limits both of time and quantity. In fine, when Louise happens to cut herself by any of the numerous accidents to which working life is liable, she does not bleed more than other persons. Need I recall the fact, that neither the punctures which I made in her skin nor the blisters which I applied produced the least effusion of blood?

§ 2. *Rare cases of hæmorrhage presenting some analogy with the stigmatic hæmorrhage of Louise Lateau.*

Cases of hæmorrhage presenting some unusual circumstance, and collected by authors on account of their rarity, are numerous in the annals of medicine. I am somewhat embarrassed amongst so many to know which to select, and which to omit. To make a suitable choice, we must consider both the degree of authenticity of these rare cases and the degree of their analogy with the stigmata.

The position of those medical men who wish to study seriously the facts of Bois d'Haine has been rendered difficult. On the one hand, people have shown themselves incredulous, or at least very 'exigeant,' as to admitting the truth of these phenomena, and, on the other, have placed in opposition to them facts of doubtful authenticity.²⁶ Nevertheless, I have accepted this position.

On the one hand, before admitting the truth and the genuine character of the facts of Bois d'Haine, I have wished to observe them for a whole year, and under the most different conditions; I have wished them to be supervised by learned men of all classes, and especially by medical men and theologians, independently of the public, who have, however, eyes to see and ears to hear, and whose testimony may be appealed to in simple questions of fact.

On the other hand, I am going to relate truthfully in this comparison the analogous morbid affections that I have met with in scientific annals, even when only stated by a single witness, or by dubious witnesses; I have declined only the ridiculous. How easily some minds, even of the most serious cast, slip from the marvellous into the impossible, is well known.

Thus, to cite only a few examples, the *Ephemerides of Curiosities in Nature*, that immense magazine whence we

²⁶ This contradiction occurs in the greater number of the articles which have appeared, at different times, either in scientific or political journals on the facts of Bois d'Haine. I specify with pleasure an honourable exception. The *Presse Médicale Belge* of Brussels has shown perfect sincerity in examining the question of the authenticity of facts.

can always draw rare and often extravagant cases, reports the case of a young man, aged twenty-five, who lost in two days seventy-five pounds of blood, four or five times more than the human body contains!²⁷ The grave Tissot himself writes somewhere to Haller, the greatest physiologist of his time, that a woman, according to a very exact estimate, must lose in one year 412 pounds of blood!

Except as to these absurdities, which respect for serious readers has prevented me from incorporating in this work, I have not been very stringent on the point of the authenticity of the facts related. I have kept to the plan of stating here the most extraordinary cases, provided they had sufficient analogy with the case of Bois d'Haine. What ought to be considered a sufficient degree of analogy? Had I wished to seem strict, I should have accepted only those facts which possessed the essential characteristics of the hæmorrhages of Louise Lateau. Now these characteristics are three: *spontaneity*, the flow of blood occurs without being produced by any external agent; *periodicity*, the flow recurs every Friday, and never on any other day; *specialty of place*, the blood never comes except from fixed points on the hands, the feet, the side, and the head.

But had I required, before their insertion for comparison with the case of Louise Lateau, that the hæmorrhages should possess these three characters, the study I have undertaken would have ended before it was begun; in fact, with the exception of some incomplete and doubtful cases which I shall, however, take care to record, I have not found a single example in which the hæmorrhage was at the same time spontaneous, periodical, and always in the same place. I am obliged, therefore, not only to consider separately the stigmatisation and the ecstasy, but to isolate the essential characteristics of the stigmatic hæmorrhages, and to admit into this record cases of hæmorrhage which present only one

²⁷ E. Weber has calculated, by a process which must give a near approach to perfect accuracy, that the proportion of the blood to the whole body is as 1 to 8; *i. e.* if an individual weigh 144lbs., he has about 18lbs. of blood in his vessels.

or two of the characteristics of that of Louise Lateau. I am not sure whether the necessities of criticism will procure me the pardon of all my readers for the tedious number of facts which I have thought myself obliged to put together, and for the delicate nature of some of them.²⁸

To introduce a certain order into these records of cases, I will arrange them in classes according to their resemblances, and without regard to their chronology. Commencing by the least complete cases, I may group together first a number which have only one point of resemblance, viz. the spontaneous flow of blood on the surface of the skin. The following is an example :

Case 1. An infant, three weeks old, was so weakly and thin that its life was despaired of. One morning, when changing its things, the sleeve of the little shirt was found full of blood, and no one could perceive from what part it had escaped. The child was stronger and more lively, and took more nourishment. The next morning a similar phenomenon was observed ; the right sleeve was found full of blood, without its being possible to find its source. This bleeding of the right arm lasted for five or six days, and every day the condition of the little patient improved. Afterwards it occurred similarly from the left arm, and when it stopped the child was considered out of danger.²⁹ This fact has no other bearing than to show that certain hæmorrhages may occur spontaneously from the skin ; it is necessary, however, to remark that the blood evidently came from the capillaries of the sweat glands, whilst in Louise Lateau it is from those of the true skin. This and similar cases which we might easily multiply need not delay us longer.

We now come to a group of more important cases, more allied in some respects to the phenomena of Bois d'Haine.

²⁸ Thus I am obliged to lay more stress than I could have wished upon the hæmorrhages supplementary to the menstrual flow. A critical study of the phenomena of Bois d'Haine, lately printed in an important medical journal, explains the stigmatic hæmorrhage of Louise Lateau precisely by this cause.

²⁹ D. Alardus Mauritius Eggardus, *Eph.*, an 10, decad. ii.

The hæmorrhage occurs in women who have attained, like Louise Lateau, their full development; it recurs frequently, and often assumes a periodical character. To avoid tedious repetition, I will first relate the facts, and then subjoin the remarks they suggest to me.

Case 2. We find in the *Ephemerides* the history of a young woman who cut her finger deeply just at the time when menstruation was due. The wound bled profusely, and the physiological flow did not appear. In the following month similar suppression occurred, and similar bleeding from the finger-wound, which was not entirely cicatrised.³⁰

Case 3. The same collection contains the following: A servant employed in a distillery burnt her foot at the time of her monthly period, which stopped suddenly. The next month it did not appear, but the young woman experienced stretching pains in the scar on the foot, and it bled profusely.³¹

Case 4. On the 10th of September 1761, at ten o'clock at night, a young woman, aged twenty-six, was struck by lightning on the middle of her forehead, at the root of the nose, on the chin, and the left shoulder. The wounds cicatrised in a regular manner, and left no other trace than a circumscribed redness. About three months after the accident, one Thursday, at ten o'clock at night, the young woman complained of an intolerable burning pain about the middle of her forehead. Towards two o'clock in the morning the wound of this part reopened; on the following night it crusted over, and the pain passed away. The next week, on Thursday night, at ten o'clock, she again felt much heat over the same part. At two o'clock in the morning the crust fell off, and, according to the account of the parents, there came from the wound blood and water. Every week, on the same days and at the same hours, a fresh opening took place at the same spot as the previous one, and this occurred nine times in succession.

³⁰ *Ephem. Cur. Nat.*, v. 15, obs. 46.

³¹ *Ephem. Cur. Nat.*, decad. iii. obs. 48.

It is important to observe that in this young person menstruation had been absent since the age of fifteen; it had occurred regularly for three years before that.³²

Case 5. A young woman, the mother of four children, received a blow on her right arm, and afterwards a scab formed on the place. Some time afterwards, at the time of menstruation, she rubbed off this crust, which itched somewhat; bleeding followed, and lasted as long as the natural function. The wound was soon covered again with a crust, which came off at the next period and occasioned bleeding, which again continued as long as the menstruation. This coincidence lasted for two years and a half, when the patient becoming enceinte, menstruation was suspended as usual; the bleeding from the arm was also suspended. Three months after delivery, both events recurred at the same time. The author says that as the functional discharge gradually increased in quantity and duration, the bleeding, which was a sort of complement of it, gradually lessened.³³

Case 6. Madame D., aged twenty-four, mother of three children, of a highly-nervous temperament, experienced some hysterical attacks at the menstrual epoch, but no irregularity. She became pregnant for the fourth time. At the period when menstruation would in its usual course have occurred, a slight itching at the end of her nose made her put her finger there; she withdrew it stained with blood. The doctor who was sent for observed that the blood came in a stream (the size only of a silk thread), which spurted out to four or five feet distance. The blood, which was of

³² Pelisson, *Journal de Médecine, Chirurgie, et Pharmacie de Roux*, t. xxiv. Janv. 1776, p. 227. The obligation I have imposed upon myself to relate all facts within my knowledge which have any analogy with those of Bois d'Haine has decided me to record the above case, in spite of the suspicion suggested by its circumstances. It is difficult not to suspect some deception, or at least some delusion, in the case of one who asserts 'that stormy weather makes the wound grow larger, and pain more; that every year, during September, on the Thursday nearest to the 10th of the month—the day when she was struck by lightning—the wound enlarges and discharges a greater quantity of blood and serum.'

³³ *Neue Zeitschrift für Geburtskunde*, 1845.

a bright-scarlet colour, came from a red and very slightly prominent spot; the narrator estimates its quantity at four or five ounces.

The same bleeding recurred twice, at a month's interval. Six weeks after the woman's delivery, it recurred in a similar manner. The doctor endeavoured to restore the periodic function; he succeeded, and the accidental hæmorrhage did not occur again. Only, at each monthly period, the spot on the nose became more swollen and deeper coloured.³⁴

Case 7. In the *Ephem. Cur. Natur.* is the history of a woman who never menstruated, and who, every month from the age of fifteen, vomited a great quantity of blood mixed with saliva. At the age of forty-eight, that is at the time when the monthly flow usually ceases, the hæmorrhage occurred no more.³⁵

Case 8. We read in the same collection the account of a woman who, after an accidental suppression of her periods, for a long time passed blood from the bowels.³⁶

Case 9. Brassarole relates the case of a nun who, having attained the age of puberty without sign of menstruation, had every month a flow of blood from the eyes and ears.³⁷

Case 10. Thomas Bartholin relates the case of a woman whose menstruation was suppressed. Every month, at a fixed time during a whole year, she vomited blood without suffering in any other manner.³⁸

Case 11. Pechlin relates the history of a woman who, being exposed to cold during her monthly period, was suddenly seized with severe hæmoptysis (bleeding from the lungs), which lasted five days. A month afterwards she felt pain and weight at the stomach, and brought up pure

³⁴ Gabber; case communicated to Latour, and recorded in the *Histoire des Causes prochaines des Hémorrhagies*, Orleans, 1815, t. i. p. 231.

³⁵ *Ephem. Cur. Nat.*, dec. iii. obs. 47.

³⁶ *Misl. Cur. Nat.*, dec. ii. cen. 10, p. 379.

³⁷ *Expos. Comment. et Annot. in aphorism. Hippoc. et Gal.*, lib. iv. 1590.

³⁸ *Histor. Anatom.*, cen. v. hist. 32.

and bright red blood. This occurred again in subsequent months, until a fresh pregnancy caused it to cease.³⁹

Case 12. Caramela, a young Italian woman, aged twenty, otherwise in good health, had only been 'regular' twice. Suppression had continued for several years, when she got a fall during an hysterical attack. Her forehead struck against the pavement, and received a slight bruise, which bled only a little. Four days afterwards she had a headache, and a flow of blood began from the top of the head. The hair was cut, and the blood was seen to ooze like sweat out of the unbroken skin.

This flow continued from the 17th June to the end of September, only its place altered. Thus, for three months it came only from the top of the head; then, without ceasing at that part, it came from the front, the back, the right side of the neck, the left ear, the corner of the eyes, &c., the skin of these parts remaining otherwise normal.⁴⁰

Case 13. Dr. Chrestien of Montpellier communicated to the Academy of Medicine of Paris, at its sitting of 24th of September 1850, an interesting fact which he had observed at the baths at Rennes, with Dr. Cassandre. It was the case of a young woman who had been sent to the establishment on account of the irregular character of the monthly flow. The blood, which had never passed in the ordinary manner, oozed from the pores of the cheek, every month, for some time. It could be seen to exude from the skin in little drops, which united and fell over the face and neck; when wiped away, they were more or less quickly replaced by others. The narrator estimated the quantity of blood lost at each period at from four to six ounces.

Case 14. In a very remarkable case, published by Dr. Guepin of Nantes, in 1861, spontaneous hæmorrhage occurred in the anterior chamber of the eye.⁴¹ A young

³⁹ N. Pechlin, *Observat. Medico-Physic.*, lib. iii. dec. i. obs. 27.

⁴⁰ Dr. Colosimo, in *Il Filatre Sebesio*, quoted in the *Encyclographie des Sc. Médic.*, 13^e série, t. xi. p. 256.

⁴¹ The eye is like a hollow globe. The posterior five-sixths are occupied by the transparent double convex crystalline lens, embedded in a gelatinous, also transparent, mass, called the vitreous humour. In front

woman, aged nineteen, who had been 'regular' for three years, had bleeding from the nose every month. The quantity of blood lost in this manner was more abundant in proportion as the menstrual flow was less. On the 18th of April her period began; this time there did not occur the bleeding from the nose, but an effusion of blood which filled the lower part of the anterior chamber of the eye.⁴²

All the hæmorrhages thus grouped together have a common character, which has led to their being called supplementary—they do, in fact, supplement a normal flow. The adult woman is, in her ordinary state, subject to a loss of blood which recurs periodically every month. It is not an accident; it is a physiological function. If this be not established at puberty, or if it happen to be suppressed later, or even if the flow become much less in quantity than usual, we observe a hæmorrhagic tendency in the system, and the blood often comes by different channels.

I am aware that nowadays a certain number of medical men deny the reality of these supplementary fluxes. But the best observers—those who do not content themselves with considering the laws of life in their study, but who also observe them at the bedside of the sick—continue to accept this ancient tradition. Further, the facts we have selected from amongst many other analogous ones leave no doubt on the point.

Supplementary hæmorrhages often present a periodicity which suggests their origin. Usually they recur every month, at the time when the normal flow which they supplement ought to appear. In other cases the intervals between them are longer or shorter; it is seldom that they occur at quite uncertain times. This characteristic is very marked in the cases above recorded. Out of thirteen such the hæmorrhage was monthly in ten, weekly in two,

of the lens, between it and the cornea (that convex glass which closes the eye in front), there is a space containing a clear watery liquid. This space forms the two chambers of the eye. The anterior one is separated from the posterior by a membranous partition—the *iris*—which is pierced by a round opening—the pupil—through which the two chambers communicate.

⁴² *Journ. de Méd. de Bordeaux*, n. 1, Sept. 1861.

and continuous in one. Now, do the weekly bleedings of Louise Lateau owe their origin to a similar cause?

Recollect that, at the beginning of April 1868, menstruation had not commenced in this young person, although she was eighteen years old. If the stigmatic bleeding had come on under these circumstances, there would have been some reason in saying the appearance of the monthly flow was in this case retarded by at least a year; Nature has supplied for this by an accidental hæmorrhage.

But this hypothesis is contradicted by the fact that menstruation, in its normal proportion, was established five days before the appearance of the stigmatic bleeding. Moreover, since then this function has been perfectly regular; whether it coincide with the stigmatic hæmorrhage or occur between two Fridays, it has no influence whatever on the appearance of the stigmata or the amount of their bleeding.

Amongst the cases of supplementary hæmorrhage which I have collected, only one recurred weekly—the case of the young woman related by Pelisson (Case 4). I have already said why I altogether distrust the accuracy of the observation. What medical man nowadays would believe that in the case of a young woman struck by lightning ‘stormy weather makes the wound grow larger and more painful; that every year, in September, on the Thursday nearest the 10th (the day when she was struck), the wound enlarges and discharges more blood and serum’? And yet these are the trifles that are to be received without reservation! But even supposing the case to be accurate in all its details, can we admit any weighty analogy between a discharge of blood and serum occurring periodically from an old wound in a girl whose menstruation is suppressed, and an abundant hæmorrhage, which appears without any previous lesion, in a young woman who is perfectly ‘regular’—a hæmorrhage which reappears every week on the day consecrated by a great religious recollection, and does not occur in an indifferent part of the body, but in ten places of mysterious significance? Another special characteristic of sup-

plementary hæmorrhages is that they change their seat. Most frequently the blood escapes from the least-supported capillaries, especially in the mucous membrane (Cases 7, 9, 10, 11, 14); or from an old wound, *i.e.* unhealthy tissue (Cases 2, 3, 4, 5); or from a point disposed to bleed in consequence of morbid growth of vessels—thus, in the sixth case, the blood spurted evidently from a little erectile tumour.⁴³ Finally, in one of the cases the hæmorrhage came from the sudoriferous glands; it was a true periodic sweat of blood. I have said sufficient concerning this malady (p. 60).

To sum up, the bleeding from the stigmata cannot be included in the class of supplementary hæmorrhages; their characteristics are clearly distinct.

Let us collate, with these supplementary hæmorrhages which so readily assume a periodic monthly type, two cases of hæmorrhage which have occurred with the same periodicity in men.

Case 15. The patient, whose history is given by Musgrave, belonged to the household of the Queen-Dowager of England. He had from infancy been subject to a bleeding from his left thumb. This bleeding occurred always at full moon. It came from the right side of the nail, and the total quantity lost each time was about four ounces. It amounted to six ounces after his sixteenth year. It occurred without headache, oppression of breathing, or any other morbid symptom, except a certain stiffness of the last joint of the thumb. The blood continued to flow until the usual quantity was parted with. In spite of these losses of blood, the young man preserved robust health from childhood to the age of thirty. At this time, impatient of his infirmity, he burnt with a red-hot iron the orifice from which the blood flowed. This operation succeeded in stopping the monthly hæmorrhage, but its consequences were disastrous. Three months afterwards he got abundant hæmop-

⁴³ Erectile tumours are formed by great dilatation of the smallest vessels (little veins, arteries, and capillaries); their walls become very thin, and thus they have a great tendency to rupture and to bleed.

tysis (bleeding from the lungs), accompanied with constant cough. His doctor succeeded in curing this; but soon after the man complained of violent pain in his stomach. There remained, moreover, a tendency to hæmorrhage; any chill or over-exertion brought back the spitting of blood. In short, after the suppression of the bleeding from the thumb, the patient, who had had excellent health, wasted perceptibly; 'which proves,' says Musgrave, 'that when Nature has set up a sort of morbid function, she is as tenacious of its continuance as she is of the accomplishment of normal functions.'⁴⁴

Case 16. Jacques Sola, a young man, aged twenty-five (says Carrère), strong, and of sanguine temperament, was, from his fifteenth year, subject to a flow of blood from the end of his right little finger; it recurred every month at about the same day. The blood came drop by drop for two days; no opening was to be seen on the finger. The patient having got his feet wet in a brook during very cold weather, the periodic bleeding did not recur, and directly he was attacked with pneumonia and dysentery. The former quickly got well; the latter was obstinate, and did not yield until the periodic flux was reinduced by putting the finger into hot water. Three months afterwards the patient spat blood, in consequence of the other discharge being suppressed: bathing brought it back, and so cured the hæmoptysis.⁴⁵

There is much analogy between these two cases: here are two young men presenting the fact of a hæmorrhage from analogous parts, a thumb and a finger, and recurring monthly.

Many observers, Virchow amongst others, have noticed in young and sanguine persons, at or near the period of puberty, a tendency to hæmorrhage, which is due to excess of red corpuscles (a plethoric state). The blood escapes commonly by the nostrils, sometimes by the lungs: it may, however, come from other parts; thus occasionally from the

⁴⁴ *Philosoph. Trans.*, vol. xii. p. 586.

⁴⁵ Latour, *Histoire Philosophique et Médic. des Causes des Hémorrhagies*, t. i. p. 261.

sudoriparous glands, the capillaries of which easily give way. This was certainly the case in the patient of Carrère, Jacques Sola, who lost blood drop by drop, without any open place being visible.⁴⁶ At other times, the hæmorrhage occurs at a point where there exists some lesion favouring the rupture of vessels; thus in Musgrave's patient there was a wound on the thumb. These hæmorrhages from plethora readily assume the periodic type, because the production of red corpuscles in excess brings back, after some time, the hæmorrhagic tendency.

The case of Louise Lateau cannot be classed with these. The bleeding from the stigmata occurs at healthy portions of the skin and from the derma itself, not from a previous wound, or from the sudoriferous glands; it does not recur *about* the same time, but *always* on a Friday and *only* on a Friday:⁴⁷ the seat of the flow is not a single or a chance place, but ten very special and invariable places.

A fourth group comprises other periodical hæmorrhages, but the intervals between them are shorter and their pathology is different.

Case 17. 'A man, aged thirty,' says Storck, 'experienced, every second day, a feeling of dryness and tickling in the throat: this was followed by a dry violent cough; the face swelled, the lips became blue, and at length the patient brought up, with a cough, a large quantity of blood. The hæmorrhage put an end to all the painful symptoms which recurred two days afterwards, and were followed by a fresh hæmorrhage. Who does not at once suspect here the existence of a hæmorrhagic intermittent fever of a tertian type?⁴⁸

⁴⁶ This oozing in drops, and the absence of appreciable lesion, make up the distinctive characteristics of hæmatidrosis, or sweat of blood.

⁴⁷ The hæmorrhage referred to by Musgrave as occurring at the new moon (!) appeared sometimes a day before or a day after; in Carrère's case it returned at *about* the same days.

⁴⁸ Intermittent fevers are such as come and go at regular intervals, which may be longer or shorter; and during these the patient enjoys his usual health. When the fever recurs every day, it is called quotidian; when every alternate day, it is tertian; when every fourth day, quartan. The usual symptoms are violent shivering, then general fever, then abundant sweating; but it is not uncommon for the onset of the fever to be

If any doubt remained as to this explanation, I should add that Storck carefully notes that the hæmorrhage was preceded every time by the characteristic shivering of intermittent fevers, and that quinine (and this is the touchstone) cured the periodic hæmorrhage after its third recurrence.

Case 18. We must compare with this a case communicated to the Academy of Medicine of Paris in 1837 by Dr. Dufour of St. Séver. A little girl, six years old, had a tertian intermittent which quinine readily cured. Fifteen days afterwards, on the 29th September, at four in the afternoon, her nose bled to about twelve ounces; on the following day she was quite well; the day after that she vomited blood; the next day was well; and on the following one, the 8th October, the body was covered with numerous *petechiæ*.⁴⁹

Such are the recorded cases of spontaneous hæmorrhage which most resemble the hæmorrhage from the stigmata. It is evident that the bleeding in the case of Louise Lateau can no more be classed with these rare cases than with the better-known hæmorrhagic diseases which we studied under the heading of classical diseases.

§ 3. *A physiological study of the stigmatic hæmorrhage.*

Let us now look at the question from a higher point of view—by the light of science; and setting aside the trammels of cases, let us see if the laws of the physiology of disease (pathology) offer us a satisfactory explanation of the stigmata.

The vessels in which the blood circulates form a system of closed tubes, and for the blood to escape from them some rupture of these walls is absolutely necessary. Such is the general proposition: before going further, we must demonstrate it.

complicated with accidents more or less grave and equally intermittent, such as cerebral or pulmonary congestions or hæmorrhages. Intermittent fevers, whether simple or complicated, yield to a specific medicine—cinchona, or its active principle, quinine.

⁴⁹ *Petechiæ* are small red or dark spots from blood effused into the thickness of the skin; they are small interstitial hæmorrhages. See p. 56.

The blood-vessels, consisting of organic membranes which are very thin, especially in the capillaries, readily permit the passage of liquids through these walls. Thus every moment there are passing from without *into* them water and nourishing fluids to renew the blood, and there are passing *out* from them elements to nourish the tissues, and also materials of different secretions, as the sweat or the bile. If the blood were a simple fluid, it would then readily pass through the coats of the vessels, and hæmorrhages might occur at any time without their rupture. But, as we have already seen, the blood consists of a liquor or plasma, and of solid corpuscles or globules, red and white. It is like a stream which carries bits of gravel along with it. The liquor or plasma can easily pass through the vessel walls, but the corpuscles cannot. In certain diseases the transudation of the plasma becomes excessive, and it pours itself either into the different organs or outside.⁵⁰ This may be called a white hæmorrhage: I say white, for the blood plasma is colourless, like pure water.

In some diseases the cell-wall of the blood-corpuscles undergoes change; it ruptures, and sets free the hæmatine, which is dissolved in the plasma, and colours it red.⁵¹ The plasma thus reddened passes through vessel walls as easily as if it were pure, and *simulates* a true hæmorrhage.

Let us begin by setting aside these false hæmorrhages, or effusions of blood without corpuscles;⁵² we have, in fact, seen that the stigmatic hæmorrhage differs from them in an

⁵⁰ When the plasma or serum of the blood thus pours itself into a large serous cavity, such as the abdominal, it constitutes ascites (dropsy). When it infiltrates the subcutaneous cellular tissue, it is anasarca (general dropsy). When it exudes externally from mucous surfaces, it is a catarrhal or serous flux.

⁵¹ Observe, once more, that the red corpuscles are true cells or hollow vesicles, containing a red-colouring matter called hæmatine.

⁵² If it be wished to retain the name hæmorrhage for these transudations of serum coloured by hæmatine, I see no inconvenience in it; only these ought to be called plasmatic hæmorrhages, to distinguish them from effusions of the real blood, which might be named corpuscular hæmorrhages.

essential character—it is of the real blood, plasma, and whole corpuscles. It is a true hæmorrhage. See p. 23, note.

I have just said that true or corpuscular hæmorrhage cannot occur without rupture of the vessel walls. This teaching has been admitted without dispute since the microscope has enabled us to ascertain, on the one hand, that the coats of the vessels have no pores or little gaping openings, as the ancients believed; and, on the other, that the blood is not a homogeneous liquid, but conveys solid corpuscles which cannot pass through where there is no opening. However, in 1867, a German physiologist, Cohnheim, endeavoured to revive the old hypothesis of the complete transudation of the blood without rupture of vessels. This point is of too much interest in the study of the problem before us to be passed over.

The following is the fundamental experiment of Cohnheim. He ligatures the femoral vein of a frog; the course of the blood is then arrested in this vessel and in the capillaries connected with it.⁵³

Soon the red corpuscles are seen heaped up and pressed against each other in the little veins and the capillaries. At the end of about three-quarters of an hour there appears on the outside of the vessels a small yellow projection, which increases by degrees, and after a very long time detaches itself from the capillary wall. This little body seems to be a red corpuscle which has changed its shape. In ten or twelve hours' time lines of similar corpuscles are seen along the little vessels.⁵⁴

This fact has been verified by many microscopists. Some, as Virchow, think with Cohnheim that the corpuscles thus observed are really red blood-globules more or less altered; others, as Kaloman Balogh, assert that this is simply a bulging of the cellular tissue which enters into the structure of the vessel walls.

⁵³ The femoral vein is the principal vein of the lower limb of man, or the hinder limb of animals; it conveys back to the heart the greatest part of the blood of the limb.

⁵⁴ 'Ueber venöse Stanung,' Virchow's *Archiv*, b. xi. 1 s. 220, 1867.

However it be, even admitting these appearances to be real red blood-globules, the phenomenon cannot be likened to hæmorrhage properly speaking, and especially not to the stigmatic hæmorrhage. It requires, for its production, the ligature of a vein and the complete stasis of the blood. The red blood-corpuscles do not exude till after a very long time. They are few in number. They remain close to the walls of the vessels, and they can never be carried away to the outside of the body. They are altered in shape. They join together in lines; they are no longer floating in plasma; in a word, what then escapes from the vessels is not the organic liquid which we call blood.

From the preceding statements we may therefore conclude that true hæmorrhage always occurs by ruptures—that is, the effusion of true blood with its plasma and globules can only occur when the vessel containing it gives way.

The problem of the pathological cause of spontaneous hæmorrhage is reduced then to inquiry into the causes which may produce this rupture.

Now in considering this subject we are easily satisfied that these causes can only be as follows: a change in the walls of the vessels; a change in the blood itself; a modification in its circulation. Let us examine successively these three kinds of causes, observing at the same time that two of them are often conjoined, sometimes all three are, and we only separate them for the sake of analysis.

This study will be long and tedious for many readers; I feel the necessity of apologising, and yet I cannot bring myself to shorten it. If I were to pass over in silence any of the causes of spontaneous hæmorrhage, it might be suspected that the interpretation of the stigmatic hæmorrhages lay precisely in the omitted causes.

Changes in the walls of the vessels constitute the most frequent cause of hæmorrhages.⁵⁵

Almost always, in spontaneous hæmorrhages, the effect

⁵⁵ All hæmorrhages which are traumatic or from injury are included in this cause—cuts, punctures, lacerations; but here we are only referring to hæmorrhages which are spontaneous or independent of external cause.

of causes of change is limited to thinning the walls of these vessels or making them more brittle. Thus their power of resistance is diminished; bleeding does not occur at once; it is only prepared for, and the intervention of some other accidental cause is required in order to determine it.

As any spontaneous hæmorrhages to be compared with those of Louise Lateau must be from the smallest vessels—that is to say, from capillaries and ultimate branches of veins and arteries—we need only occupy ourselves with the changes of this portion of the vascular system. In small vessels the changes which are capable of producing a spontaneous hæmorrhage show themselves under two different conditions. Sometimes it is the organ in which these vessels ramify, which is primarily diseased. The mischief naturally *extends* to the capillaries which enter its structure; in one part it may be an inflammation which lessens the resistance of the vessels; in another it is a foreign product, as cancer or tubercle, which invades and disorganises the part, and at the same time its blood-vessels.⁵⁶

We need not discuss hæmorrhages consequent on this kind of change; it is quite evident that Louise Lateau does not present any trace of any malady whatever in the places of the stigmata.

At other times the small vessels themselves are the first to suffer; the diseases which dispose them to hæmorrhage are dilatation and degeneration of their walls. The capillaries are sometimes permanently dilated; not unfrequently they attain to $\frac{1}{25}$ th or even $\frac{1}{12}$ th of an inch in diameter.⁵⁷

It is possible that in Louise Lateau the capillaries of the stigmatised parts may be more or less dilated. If this

⁵⁶ 'Hæmorrhages,' says Weber, 'easily occur in tissues which are wounded, inflamed, or growing unhealthily. Vessels soaked in exudation or surrounded by soft fresh-growing tissue, and especially when bathed in pus, easily give way on even a slight increase of the blood tension. This is the cause of frequent hæmorrhages in inflamed tissues' (Œuv. cit., p. 130).

⁵⁷ It must not be forgotten that healthy capillaries are only $\frac{1}{3300}$ th to $\frac{1}{2000}$ th of an inch in diameter. When, therefore, they reach $\frac{1}{12}$ th of an inch, their size is immensely increased.

induce a predisposition to hæmorrhage, it must be acknowledged to be very slight; since in old people with catarrh, for instance, in whom the capillaries of the mucous membranes are very largely dilated, we do not see hæmorrhage happen from this cause, although effusions of blood readily do occur from mucous membranes.

A more important change in the capillaries and small vessels generally is the fatty or amyloid degeneration of these walls.⁵⁸ When the normal tissue of these is thus replaced by a friable substance, the least increase of the pressure of the blood upon them causes them to give way and to permit the effusion of blood. But it is well known that these alterations in the vessels, common enough as they are in the visceral, and especially in the cerebral capillaries, occur very rarely indeed in the skin capillaries, and are never observed in youth. Moreover, it is impossible to conceive that such changes should take place at nine or ten limited areas on the surface of the body, and not at all affect the rest of the capillary system.

Within the last few years Virchow has determined a fact which bears more closely on the present question. He has demonstrated that young vessels are more fragile than those which are fully developed. 'When first formed,' says he, 'the vessels have very thin walls: hence the frequency of hæmorrhages in the young. It is the same with any freshly-formed blood-vessels, they bleed often.'⁵⁹ Relying on this observation, which I take as accurate, it might be said: 'In Louise Lateau blood flows every Friday from the stigmata; there is therefore a rupture of small blood-vessels, and afterwards of necessity some amount of repair. Now wherever organic repair is going on, there is a fresh growth of young vessels; in the following week these new vessels, being fragile, give way from the pressure of the blood. Hence the recurrence of the hæmorrhage.'

⁵⁸ In these degenerations, the normal tissue of the vessel-walls is replaced either by fat-cells or by a homogeneous, shiny, brittle substance (amyloid degeneration).

⁵⁹ *Handbuch der Spec. Path.*, p. 240.

This theory is altogether insufficient to account for the stigmatic bleeding. It would first of all be necessary to explain how this could begin the first time, from healthy and fully-developed vessels—at the side, on Friday, 24th April 1868; at the two feet on the following Friday; and at the other stigmatic surfaces on the third Friday.

But granted even that this difficulty is waived, how is it that the hæmorrhage recurs every seven days? Does it happen that by chance the vessels are too new to break on the sixth day, and too old on the eighth?

We have now reviewed the hæmorrhagic diseases of capillaries as far as pathological anatomy has revealed them up to the present. There are others perhaps to be discovered; but whatever change can be supposed, there is not one which can explain hæmorrhages occurring at regular periods, and invariably at the same part of the skin. It must be observed further that bleeding from a rupture of diseased capillaries would not continue, as in Louise Lateau, for ten to fifteen hours. When the skin is healthy, hæmorrhage from its capillaries soon stops of itself. 'When,' says Weber, 'the surrounding tissues contract, the capillaries are compressed, and the coagulation of the blood is scarcely required for the stopping of the flow. The skin being very rich in contractile elements, bleeding from it is less, and is arrested more easily than it is from mucous membranes which are less provided with this tissue.'⁶⁰

We now come to the *second set* of causes of spontaneous hæmorrhage—*changes in the blood*.

We have seen that in certain diseases the serum of the blood, reddened by the dissolved hæmatine of the corpuscles, is observed to pass through unruptured vessels; it is only a simulated hæmorrhage, since blood-globules are not to be found in the extravasated fluid.

It has long since been proved by observation that in some diseases of the blood this fluid may escape from the vessels in its entirety, both serum and corpuscles, and with-

⁶⁰ Œuv. cit., p. 132.

out the latter being altered. In support of this assertion we proceed to mention instances.

Certain foreign substances, when introduced into the blood, may induce a real hæmorrhage. Thus Ricord has seen purpura follow the prolonged administration of iodide of potassium, and Virchow has seen bleeding from the gums from the same cause. Weber and Frerisch have caused numerous ecchymoses in different organs by injecting into the blood water containing a very small quantity of sulphuretted hydrogen.

All medical men know that alcoholic poisoning causes hæmorrhage amongst other symptoms, and so also does phosphorus. Gaspard was the first to prove that the absorption of septic material causes effusions of blood in the intestines, lungs, and heart.⁶¹ The poison of some animals, the viper for instance, produces the same. In diseases characterised by serious changes in the blood hæmorrhages always occur; this is the case in scorbutus, purpura, malignant fevers, typhoid diseases, yellow fever, plague. Effusions of blood from the same kind of cause occur, though less constantly, in pulmonary consumption,⁶² in the cancerous constitution,⁶³ and in certain diseases of the liver,⁶⁴ the spleen,⁶⁵ and the kidneys.⁶⁶

Finally, certain changes in the relative proportions of the different constituents of the blood are enough to induce hæmorrhages.⁶⁷ On this point our knowledge is not yet very

⁶¹ *Journal de Magendie*, 1822, t. ii. p. 1.

⁶² M. Charcot was one of the first to demonstrate that purpura shows itself not uncommonly amongst the phthisical as a consequence of blood change (*Comptes Rendus des Séances de la Soc. de Biologie*, 1857, tom. iv. p. 126). M. Leudet has seen hæmorrhage occur under similar conditions from the intestine, the nostrils, and the skin (*Remarques sur la Diathèse Hémorragique*, *Mém. de la Soc. de Biologie*, 1859, p. 179).

⁶³ Follin, *Gaz. Méd.*, 1862, p. 809.

⁶⁴ Monnoret, *Traité de Pathologie Gén.*, t. ii. p. 402.

⁶⁵ Virchow, *Handbuch der Spec. Path.*, t. i. p. 247.

⁶⁶ Fournier, *De l'Urémie*, Paris, 1863.

⁶⁷ The blood is a very complex fluid. This may be readily believed when we consider that it must supply the tissues with all the elements which enter into their composition. Now not fewer than fourteen elements enter into the composition of our bodies: oxygen, hydrogen, carbon,

precise, but the following is ascertained. A marked diminution in the normal proportion of the fibrine of the blood leads very probably to spontaneous hæmorrhages, and unquestionably tends to make them more profuse and lasting when they happen to be produced by any other cause.⁶⁸

Again we know, especially from the labours of Virchow, that the increase in number of the white globules of the blood, which is the characteristic of leukhæmia, is accompanied usually with various hæmorrhages. An opposite condition, increase in the number of red corpuscles, disposes also, but in a less degree, to effusions of blood.

We know that there is a disease, plethora, of which the anatomical character is an increase in number of the red corpuscles of the blood,⁶⁹ and the symptoms are fulness and hardness of pulse, heat of skin, purple colour of the face, headache, vertigo, &c. Not uncommonly the capillaries give way under the blood pressure, the bleeding then produced is precisely the remedy for the evil; the general symptoms subside under the influence of this natural blood-letting. But the hæmorrhage has a tendency to return when the blood, which it has for the time impoverished, recovers its abnormal richness.

Such are the blood changes which give rise to spontaneous hæmorrhages. There is one unknown quantity in the problem: How can any alteration of the blood of any kind whatever, supposing the corpuscles to remain intact, give rise to hæmorrhage?

On the one hand, pathology teaches that true corpuscular

nitrogen, sulphur, phosphorus, chlorine, fluorine, silicium, potassium, sodium, calcium, iron, magnesium. These elements are almost all found in various chemical combinations. The most important are, fibrine, 3 parts in 1000 of blood; albumen, 70 parts; water, 790 parts. These are the principal constituents of the plasma or liquor sanguinis. Hæmatine is the principal constituent of the corpuscles. The proportion by weight of corpuscles in the blood is 127 to 1000.

⁶⁸ Hérard, in a case of purpura, found no trace of fibrine in the blood (*Comptes Rendus de l'Académie des Sc. de Paris*, Oct. 28, 1852).

⁶⁹ Andral has shown that the quantity, by weight, of blood-globules may, in cases of plethora, rise from 127 per 1000 (its normal proportion) to 154.

hæmorrhage cannot occur without rupture of vessels ; on the other, many observers relate cases of true hæmorrhage due to blood diseases without noticing any change in the vessel walls.

There is here some contradiction evident to every one. Pathologists who have studied the question most are inclined to think that the blood change induces a change in the walls of the vessels ; the blood indeed is the means of nourishment for the vessels as for other parts. If the nourishing liquid be adulterated, the nutrition of the vessels will suffer ; their weakened coats will readily yield to the pressure of the blood. This is the opinion of Virchow⁷⁰ and of Niemeyer,⁷¹ and also of Weber. ‘The change in the blood,’ says this eminent pathologist, ‘may well cause the bleeding to last longer, but cannot explain the cause of the exit of the blood itself. Blood less coagulable than is natural cannot escape from a vessel without rupture of it. We must always fall back then on some change in the vessels. The smallest arteries, vesicles, and capillaries, receiving as they do their nutrition from the blood which circulates in them, must especially suffer as to structure when this fluid is unhealthy.’⁷²

Many objections might be made to this theory. How can we admit, for instance, that the venom of the viper or rattlesnake can induce, in a few hours, such a change in the nutrition of the vessel coats as will explain their rupture ? Fortunately the solution of this difficulty need interest us only from the scientific point of view, and is quite unnecessary for the proving of our proposition. Hæmorrhages from blood changes have, in fact, symptoms so clear and distinctive that we shall not find it difficult to decide whether the stigmatic hæmorrhages of Louise Lateau belong to this pathological group.

These distinctive characteristics are seen, in the place of their occurrence, the course they follow, the other morbid

⁷⁰ *Handbuch der Spec. Path.*, p. 238.

⁷¹ *Elem. de Path. Intern.*, t. ii. p. 848.

⁷² Weber, *Œuv. cit.*, p. 140.

phenomena which accompany them, and in the condition of the blood which escapes from the vessels.

As to the place where they occur, the whole mass of blood being unhealthy, the bleeding will necessarily occur at many and various parts of the body; if at one part more than another, it will be where the capillaries are but little supported, as in the nostrils, the bronchi, and the subcutaneous cellular tissue; or from organs such as the uterus, when the force of pressure downwards acts as well as the thin condition of the blood to cause its effusion.

We may even go farther: if we admit the theory of Virchow and of Weber to explain hæmorrhages from blood changes—that is to say, if we recognise that these hæmorrhages are always due to consecutive change in the walls of the vessels—we may maintain, under this hypothesis, that the flow of blood will NEVER occur from the palm of the hands or sole of the feet, because the capillaries of these regions ramify in a tissue which is too resistant to permit their being torn by the force of the blood.

We may add, that for the same reason the seats of the hæmorrhage are always diffused, not circumscribed. As to the course of these hæmorrhages, it is never clearly periodic, on account of their cause remaining permanently in the system.

Besides, hæmorrhage is not the only symptom of these profound alterations in the blood; the general health is seriously affected. Other morbid symptoms give a special appearance readily recognised; one symptom, in particular, is rarely absent, viz. dropsy.⁷³ Finally, the blood which does escape presents characters evident at first sight and independent of all analysis: it is the colour of plum-juice, diffuent, non-coagulable, &c.

Is it necessary to prove that the stigmatic hæmorrhages of Louise Lateau do not resemble in any respect hæmorrhages due to blood changes? The limited and invariable

⁷³ Dropsy, which consists in transudation of the serum of the blood through the walls of the vessels, always occurs more readily than the effusion of the corpuscles, which constitutes true hæmorrhage.

site of the stigmata, and the singular periodic recurrence of the bleeding, are in themselves so distinctive that it would be sufficient to appeal to them. Recollect, however, that the essential constituent of the blood—the fibrine—and the red and white corpuscles retain their normal proportion; and that Louise Lateau is entirely free from all diseases which induce hæmorrhagic blood changes, such as tuberculosis, cancer, &c.

Yet it may perhaps be said again, ‘ Amongst these diseases there is one much resembling the healthy state, and which induces sometimes hæmorrhage of an intermittent type; and that is plethora. This young woman whom you describe as so ruddy and so healthy, has she not an excess of health, so to speak? Is she not plethoric, and would not her losses of blood constitute the weekly crises of plethora?’

I confess that the question seems to me almost foolish; but since it is raised, let us consider it. In the first place, Louise has none of the symptoms of plethora, and, moreover, the poor girl has neither the luxuries nor comforts of life that are the necessary conditions of plethora. Further, the hæmorrhages due to plethora, like all others from general causes, come from the least-supported capillaries, as those of the lungs, the nostrils, or the intestines; and if they happen to be sometimes periodic, the exuberant formation of globules is neither so quick nor so constant as to induce a hæmorrhage every week—particularly on a fixed day.⁷⁴ We come, then, to the conclusion, that in the case of Louise Lateau the weekly hæmorrhage cannot be explained by any change of any kind in the composition of the blood.

Let us now consider the *last cause* of spontaneous hæmorrhage, viz. *blood tension*. We know the heart to be a contractile bag which forces the blood into the arteries, out of which it passes into the capillaries, which ramify amongst all the tissues; then it returns by the veins to its starting-point, and commences again its endless round.

⁷⁴ If an excess of proof were necessary, we might add that, under this hypothesis, when menstruation happened on a Friday, it should cause the suppression or diminution of the stigmatic bleeding, which is not the case.

All these vessels, arteries, capillaries, and veins are moderately distended by the blood they contain. At each contraction the heart propels into the arteries about six ounces of blood, which quantity maintains the tension.

By blood tension we must understand the force with which this fluid presses against the walls of the vessels, the force consequently with which it tends to rupture them. The amount of this tension in the arteries and veins has been accurately measured. In the arteries it is about one-fifth that of the atmosphere, *i.e.* it will support a column of mercury in vacuo at a height of 5.9 inches.⁷⁵ In proportion as the blood passes on in the vessels, the resistance it meets with absorbs some of the force which was given to the wave of blood by the heart contraction, and lessens its tension.

This tension becomes very weak in the veins; it varies according to the vein in which it is measured, but its average is scarcely more than from half to three-quarters of an inch—that is to say, again, that it would support a column of mercury from half to three-quarters of an inch in height. The tension of the blood in the capillaries is not exactly known; we only know, from the direction of the current, that it is weaker than it is in the arteries, and stronger than it is in the veins.

The vessels easily stand the ordinary normal tension of the blood; but it is evident that if this tension were augmented to any great extent, their coats would give way, and hæmorrhage would result. What degree of tension can the vessels support without rupture?

Clifton Wintringham demonstrated a long time ago that the arteries support, without injury, a pressure equal to four atmospheres (nearly ten feet); that is to say, nearly

⁷⁵ In other words, the amount of pressure of the blood over a square centimètre ($\frac{1}{100}$ th of an inch) of the wall of an artery is measured by the weight of a column of mercury one centimètre ($\frac{1}{100}$ th of an inch) square at base, and 15 centimètres in height. We are accustomed to compare the blood tension with the atmospheric pressure. We know that the weight of the atmosphere is equal to that of a column of mercury about 30 inches in height.

nineteen times more than their usual normal amount.⁷⁶ The veins bear, without tearing, a still greater pressure. The amount of resisting power in the capillaries is not so great. We may, however, well believe that this is considerable, when we recollect that the majority of workers in all occupations pass their lives without any capillary hæmorrhage, though they are at every moment exposed to all the causes likely to increase the blood tension to its greatest amount. Even the most potent causes, then, of increased tension in the capillaries with difficulty cause hæmorrhage.

This is the opinion of Virchow: 'When the vessels are unaltered,' says he, 'it requires a very great disturbance of circulation to provoke hæmorrhage; a simple congestion, independent of previous changes in the walls, is generally quite insufficient to do so.'⁷⁷ There exists, it seems to me, in the system a physiological arrangement which must tend to make very uncommon hæmorrhages due to simple increase of blood tension, when the vessel walls are not altered. It is this: we have seen that these walls are readily traversed by the liquid part of the blood (plasma or serum); when their distension becomes too great and threatens to rupture them, they permit the passage of the blood serum which permeates the neighbouring cellular tissue. This transudation naturally relieves those vessels which are too full, and prevents their rupture. Do we not see this every day in the greater number of heart-diseases, wherein the tension of vessels is often excessive? They do not rupture and give rise to hæmorrhage—they unload themselves, by parting with their serum, which causes the dropsy so frequent in these diseases.

Moreover, the resisting power of the capillaries must vary according to their situation; they are weakest in the pulmonary, nasal, and uterine mucous membranes; and it is almost always in these regions that we see hæmorrhage is produced when any cause suddenly augments the tension

⁷⁶ *An Experimental Inquiry on some Parts of the Animal Structure*, 1740, p. 171.

⁷⁷ *Handbuch der Spec. Pathol.*, p. 126.

in the capillaries. As the skin capillaries are narrower and are well supported, their resisting power is very much more. M. Bouchard has tried to measure it. By a very well-devised experiment, he has shown that the skin capillaries do not give way until the blood tension amounts to nearly thirty-one inches (IX.). If we bear in mind that the utmost power of the heart cannot raise the tension higher than seven and a quarter inches, there follows at once a consequence of great importance in the question before us; it is, that bleeding from the skin cannot be induced by the sole action of the heart—consequently not by mental influences only, since these can only act upon the vessels by and through the heart.

Let it be well observed that M. Bouchard, in his remarkable experiments, succeeded only in producing small ecchymoses, a few lines in extent, in the thickness of the skin; not one drop of blood passed through the epidermis.

There is one pathological event during which the tension of the small vessels seems stretched to its farthest limit, and that is (during) a violent epileptic fit. In this, it is true, bleeding from mucous membranes occurs rather often; sometimes we see a point of ecchymosis on the face, but the blood never escapes from the surface of the skin. I do not know in pathology of one example to prove the possibility of bleeding occurring from the single cause of increased tension—unless, perhaps, certain cases of hæmatidrosis.⁷⁸ We might, then, here assert the conclusion that the stigmatic hæmorrhages are not produced by increase in blood tension.

Nevertheless, it will be useful to consider briefly the different causes of such increase, if only to see the bearing of the idea which has been suggested to explain the hæmorrhages of Louise Lateau.

The causes which may increase the tension of the small

⁷⁸ Let me point out again that in hæmatidrosis the blood escapes from capillaries which ramify in the sudoriferous glands, where they are almost as little supported as in mucous membranes. The bleeding from the stigmata is from the vessels of the derma.

vessels so far as to rupture them and cause hæmorrhage may be summed up under a few heads.

First are the diseases of the heart and the vascular system. These are frequent sources of hæmorrhage; in them its two most powerful causes are found together—increase in tension, and change in the vessel walls.

Secondly, diseases of certain viscera, the liver, the kidneys, or the spleen; these may also increase blood tension so much as to induce rupture of the vessels.

Two weighty reasons dispense me from discussing these sources of hæmorrhage: first of all, it is quite evident that Louise Lateau shows no sign of any serious lesion of heart, or vesicle, or more important viscera; and secondly, these maladies never produce effusions of blood outside the skin.⁷⁹ A third cause of increase in tension is violent or irregular muscular contraction.

All violent exertions, such as those required in certain occupations, or the powerful and irregular muscular contractions observed in convulsive diseases, may increase the blood tension in certain parts of the body and cause the small vessels to give way.

Now, it is asked, is not the ecstasy of Louise Lateau accompanied with certain tonic muscular contractions capable of causing the stigmatic hæmorrhages?

Besides that the strongest muscular contractions, when directed in the best manner to effect the rupture of vessels in nine or ten limited parts of the body, would be altogether powerless to produce this result, it will be enough to observe that the stigmatic hæmorrhages began thirteen weeks before the ecstasy, and that still, every Friday, they begin several hours before it. Compression of the veins to such an extent as to close these channels without deranging the current of blood in the arteries necessarily induces much congestion of the small vessels. This effect is produced to a certain

⁷⁹ However, to complete the subject, I will, in the Appendix, enumerate and briefly describe these pathological cases (X.). Thus the reader may satisfy himself that hæmorrhages due to the kind of causes here spoken of occur always from the mucous membrane of the lungs or nostrils, or internally, as in the brain or the kidneys.

extent by a ligature placed round a limb. This cause alone would not induce hæmorrhage. Moreover, I have taken care to satisfy myself on different occasions that in Louise Lateau no band, nor any part of her clothing, interfered with the venous circulation.

The third and last group of causes tending to induce hæmorrhage from excess of blood tension includes what are called moral causes.

This question remains for our examination, and may be stated thus: Is it true that the mind, by the exercise of its different faculties—the power of imagination, the strength of will, or the violence of emotion—can cause, without previous disease, true hæmorrhages, and especially the hæmorrhage of stigmata? Some learned men say so. No one has stated this theory in a more attractive manner than M. Alfred Maury, member of the French Institute, and I cannot do better than quote his own words: ‘The imagination, when strongly excited, can affect our bodies in such a manner as at one time to develop maladies, at another time to cure them. To the class of maladies engendered by imagination belong the strange complaints produced under the influence of Christian mysticism. When the imagination is strikingly impressed, it makes the whole system yield to its impressions. We may, therefore, conceive it capable of imprinting upon a part of the body where it has concentrated its full power a mark, a kind of wound, which will afterwards leave a true cicatrix. Such is the explanation, it seems to us, of cases of stigmata.’

The author, applying his theory to the interpretation of the stigmata of St. Francis of Assisi, proceeds thus:

‘St. Francis had reached the end of his career, and had seen all his plans successful; he had obtained from Pope Honorius III. the confirmation of the Order for both sexes, as founded by himself; he had inaugurated a new rule, which was regarded as the most perfect ideal yet conceived of the monastic life. Content with so glorious a work, he had resigned his generalship to Peter of Catana, that he might have nothing to think of but his salvation. He with-

drew then into a solitude of the Apennines, between the Arno and the Tiber, not far from Camaldoli and Vallombrosa, and fixed his retreat upon a mountain called Alvernus, which its proprietor, a nobleman, named Orlando Cataneo, had given to him. There, free from the duties and anxieties of practical life, he gave himself up unreservedly to all the hardships of the severest asceticism, and unceasingly meditated upon God. Ecstasies from time to time seized upon his soul, and made him more and more indifferent to earthly things. Mortification and fasting succeeded each other without relaxation. One of the extra Lents which he imposed upon himself was from the Feast of the Assumption to that of St. Michael. Weakened by fasting, and absorbed one day in aspirations of the most ardent prayer, he believed that he heard God command him to open the Scriptures, and read what would be most pleasing to his Creator. Struck with this divine instruction, St. Francis poured out his thanks to God in renewed prayer, which surpassed in fervour the devotions to which he had given himself up from the beginning of this Lent. "Open me the holy Book," said he to Brother Leon, who had followed him into his retreat. Three times was the trial made, and three times did the volume open at the Passion of Jesus Christ. The saint believed that herein he saw a command to push still farther than before his imitation of his Saviour's life. It was true he had silenced the flesh by mortification, and had crucified his mind and his desires, but he had not yet subjected his body to the torture of the Passion; and this it was which God ordained for him by pointing out this narrative in the Gospel.

'After this proof, the solitary had but one thought—the crucifixion of his Divine Master. He thought over and over again its painful phases, stimulating his imagination more and more every time he prayed. At the same time that he weakened his body by a prolonged fast, he laboured to reproduce within himself the affecting picture of his Saviour on the cross. In his visions he was so deeply absorbed in the contemplation of the suffering God that he

lost consciousness of himself, and seemed transported into a supernatural world. On the Feast of the Exaltation of the Cross, giving himself up because of the solemnity to a yet greater degree than usual of this ecstatic contemplation, he believed he saw a seraphim with six bright and burning wings descend rapidly from heaven and approach him; the angelic spirit bore between his wings the figure of a man with hands and feet nailed to a cross. Whilst the saint beheld this miraculous spectacle with profound emotion and astonishment, suddenly the vision vanished. But the pious anchorite had experienced from it a strange effect, and his whole being remained profoundly stirred. He experienced, especially in his feet and hands, painful sensations, which shortly gave place to ulcerations—a kind of wound which he considered as the stigmata of the Passion of Christ.⁸⁰

To this picture it must be added that the wounds of St. Francis were the seat of abundant hæmorrhage. Such is M. Maury's theory; it is, I do not hesitate to say, the romance of physiology, but it is not physiology itself. Let us set down exactly what this does teach on this matter. I will formulate our actual knowledge in the following propositions:

1. The imagination cannot act upon the circulatory system except through the nerves. This is so well established that it would be idle to demonstrate it.⁸¹

2. Changes of circulation capable of producing hæmorrhage may arise, not only in the heart, but also in the vessels—arterial, capillary, and venous. It is then indispensable to study the action of the nervous system on these different parts of the circulatory system.

3. The nerves distributed to the heart and the vessels are of two kinds; one set come from the great sympathetic, the other from the brain and spinal cord (cerebro-spinal).⁸²

⁸⁰ *Revue des Deux Mondes*, 1854, p. 457 et seq.

⁸¹ What I say here of the imagination is exactly applicable to the other powers of the mind.

⁸² The nervous system has, in man, two centres: one is the great sympathetic—a double nervous cord, which extends from the base of the skull to the end of the spine, lying along the anterior surface of the latter;

4. The action of the nerves called 'vaso-motor,' which come off from the great sympathetic to supply the heart and vessels, is to cause the contractions of those organs. If we increase the activity of these nerves—that is, if we stimulate them—the contraction of the heart becomes stronger and more frequent, the contractions of the muscular walls of the arteries and veins become stronger, and may even arrest for a moment the current of blood. As the capillaries possess neither muscular coats nor nerve supply, they cannot undergo this kind of action. If, instead of stimulating the sympathetic nerve branches we diminish their activity, and particularly if we destroy it—that is to say, paralyse them—an opposite effect is observed. The heart action is made much slower; it continues to beat for a certain time, because it has in its substance nerve ganglia, which are little centres of innervation; but the powers of these are soon exhausted, and the beatings of the heart cease. In the arteries and veins paralysis of the great sympathetic induces a very relaxed condition; they let themselves be distended by the blood which flows into them. Observe, before going farther, that these two opposite states of the sympathetic may both tend to produce hæmorrhage. If we *stimulate* this nerve, the heart contractions become stronger and force the blood more powerfully into the vessels, and thus increase their tension. If the veins become narrowed under the influence of the same stimulation, they do not continue to admit blood from the capillaries, which become congested, distended, and disposed to rupture. On the other hand, *paralysis* of the sympathetic may favour hæmorrhage in another manner. Suppose the arteries and veins to be completely relaxed, the current presses through the re-

it presents, at intervals, ganglionic swellings, and sends branches to all the organs of digestion, circulation, respiration, &c. This is the nerve system of vegetative life. The other centre is the brain, which is continued into the spinal cord (cerebro-spinal centre). The nerves which branch from this are connected principally with the life of relation (sensation, locomotion, &c.).

laxed arteries without resistance, and reaches the capillaries with a tension to which they are not accustomed, and which may cause their rupture. Such is the action of the great sympathetic on the circulation.

5. The action of the cerebro-spinal nerves is not so accurately determined. We know, however, that some of them possess, with regard to the heart and vessels, the power of stopping their action—*i.e.* that the effect of their stimulation is to arrest or to lessen the contractions of these organs. This is proved as far as regards the pneumo-gastric, which distributes its branches to the heart. When this nerve is suddenly and strongly excited, the heart-beats stop. Soon afterwards they recommence, and, as demonstrated by Claude Bernard, after this temporary stoppage, they become, by a sort of reaction, stronger and quicker than before.⁸³

But this action of the pneumo-gastric extends itself in a peculiar manner, by virtue of another physiological law—that of reflex movements. Any stimulation of a sensory nerve may be reflected to the pneumo-gastric. This indirect stimulation of the nerve may produce on the heart the same set of effects as the direct kind just described; that is to say, the stoppage or lessening of the heart-beats, and, by reaction, their increase in power and rapidity. We see the extent to which this nerve can influence the circulation; a strong and sudden impression as of violent emotion may, by reflex action, affect the sympathetic, suddenly stop pulsation, and kill on the spot. A less-powerful emotion arrests for a moment the action of the heart, whence results the pallor of the face; soon the reaction occurs, the heart hurries the blood current in the vessels of the face, which grows purple, and in those of the lungs, which may give way under the pressure and produce hæmorrhage.

It is probable that other cerebro-spinal nerves possess with regard to the vessels the same power that the pneumo-gastric does with regard to the heart. Claude Bernard

⁸³ In some cases the stoppage of the heart action may be final; this means death, and sudden startling death.

seems to me to have proved this as to two of these nerves.

Such are the best-known facts as to the innervation of the heart and the vessels. I need not say that science is not yet so far advanced as to permit us to analyse the action of the imagination or of the moral feelings upon these different nerves; but I proceed to formulate a double hypothesis, which will certainly go beyond what is really known.

I assume, first of all, that the imagination *can* produce upon these different nerves the maximum effect of which they are susceptible; that it is, for instance, as powerful as electricity to stimulate them, and as efficient as section for their paralysis.⁸⁴ I propound a second hypothesis: I suppose the combination of arterial contractions and nerve paralysis of every kind most favourable for the production of hæmorrhage. I suppose, for instance, the union of the following physiological actions:

The heart contracting violently, forcing the blood into the vessels with all the strength of which it is capable; by a directly contrary nerve action the arteries are paralysed, they let the blood current flow without resistance, so that it reaches the capillaries with all its force: by another singular nerve action the veins are narrowed to obliteration; they no longer admit blood from the capillaries, which become more and more congested.

Well, even under these conditions, it is possible that hæmorrhage will occur from mucous membranes or within the viscera, but *it will not occur at the surface of the skin.*

These contradictory conditions never present themselves at the same time in the system when left to itself. But M. Bouchard has made upon animals experiments which

⁸⁴ Electricity is the strongest nerve stimulus known; there cannot be a stronger; its stimulating effect may even produce inflammation of the nerve. As to section, we know that it is a radical means of altogether paralysing their action.

realise them artificially. In his first experiment, on a full-grown healthy rabbit, he ties the jugular veins of both sides ; that is to say, all the vessels which can bring the blood back from the head to the heart ; the blood is therefore made to accumulate in the capillaries of the head. The two ears are seen to grow red. Then he divides the cervical sympathetic on the left side :⁸⁵ this results in paralysing the vessels. The arteries permit without resistance the passage of the blood ; the small vessels being paralysed offer less resistance to its impetus. The congestion of the left ear increases, but no hæmorrhage follows. Finally, in order to increase the blood tension in the small vessels, he ties the abdominal aorta, the only vessel which conveys blood to the lower half of the body ; the whole mass of blood therefore is carried to the vessels, which remain open, and specially to those of the ear—a third condition which much increases the blood tension in that part.

Under these conditions, so favourable to hæmorrhage, not even a single ecchymosis appears, either in the ear or even in the conjunctiva.

In another experiment, repeated under similar conditions, M. Bouchard further injected seven ounces of blood into the aorta to increase the vascular tension, and with a similar negative result.

In another case, operating upon a rabbit which was young, and in which the capillaries consequently offered less resistance, M. Bouchard succeeded in producing in the ear tissue extremely minute hæmorrhagic points ; but the epidermis remained intact, and not one drop of blood oozed from the surface of the skin. Here there are experiments that realise hæmorrhagic conditions which the imagination or the strongest moral feelings can never bring together : in two cases not a single drop of blood escapes from the vessels ; in a third, a few small drops from a fine dotting in the thickness of the skin.

⁸⁵ Observe that the heart retains a nerve supply from the right cervical sympathetic ; it does not share the paralysis of the vessels.

How unreasonable, then, to appeal to the imagination to produce hæmorrhage to the extent of many ounces, to produce it outside the skin, and not from parts selected by chance, but from ten definite circumscribed places; and lastly, to reproduce these fluxes on a fixed day?

There is, moreover, in the facts of Bois d'Haine one circumstance which would necessarily prove that the hæmorrhage is not from excessive blood tension. The bleedings in Louise Lateau occur over limited surfaces, about an inch in diameter, and they never appear elsewhere. It must therefore be admitted that any excessive blood tension occurs only at these limited areas. Now we have seen that the phenomenon begins by a considerable effusion of serum, which raises and distends the epidermis. Is it not evident that this exudation of the blood plasma would suffice to relieve the existing congestion, to lower the blood tension, and prevent hæmorrhage? And if it be not admitted that this transudation of plasma is sufficient to unload the vessels and prevent their rupture, it must at least be agreed that the hæmorrhage should occur when the tension has reached its maximum, and consequently *before* it be lessened by the exuding of the plasma.

To resume: the physiological theory of spontaneous hæmorrhage does not give us the clue to stigmatic hæmorrhages; according to it, they are not only inexplicable but impossible. Observation testifies to the same effect. I have examined old records of cases of hæmorrhage.⁸⁶ I have sought amongst rare cases the morbid phenomena that might be attributed to the imagination, to the will, to the moral emotions—in a word, to the action of the soul on the body. I have found a fair number of hæmorrhages produced by these influences at the surface of mucous membranes or within the viscera, and some rare cases of sweat of blood—that is, of rupture of the capillaries of the sweat glands (see

⁸⁶ I will mention in the Appendix, under the heading of 'Books of Reference,' the titles of the works I have consulted, in order that the reader may verify, and, if he will, complete, these researches.

Appendix, XII.). I have *not found one case* where a spontaneous hæmorrhage has occurred, under moral influence alone, at the surface of the skin. The fact most nearly allied to the stigmata is mentioned in the *Ephemerides*: the reader will see how very far it is from the hæmorrhages of Louise Lateau :

‘A young girl seeing an abscess opened in her mistress’s arm felt so strong an emotion that the corresponding place in her own arm became red.’⁸⁷

I will now sum up briefly the conclusions of this study. The stigmatic hæmorrhages of Louise Lateau do not belong to any of the kinds of hæmorrhages admitted into the regular lists of science.

They cannot be likened to any of the extraordinary cases recorded in the annals of medicine.

The laws of the physiology of disease (pathology) do not give us any explanation of their production.

II.

A STUDY OF THE ECSTASY FROM A MEDICAL POINT OF VIEW.

WE know that the nervous system in the human economy has to perform higher functions than other parts of our body. Not only does it take part in all our bodily functions, but—and this it is which gives it preëminence—it is the instrument, in our earthly state, of the manifestations of the soul. From this it follows that the nervous system is the seat of many phenomena, some being of a purely organic, others of an intellectual, nature. It is not always easy to distinguish clearly these different orders of phenomena ; and the reader will not be surprised at the im-

⁸⁷ M. Bouchut relates a very analogous case, which is perhaps the same one revived (*Dict. de Therap.*, 1866, p. xxii.).

portance which I attach to the comparison of ecstasy with pathological nerve phenomena in the study of the facts of Bois d'Haine.

In this study we shall follow the plan we adopted in the critical examination of stigmatisation. We shall compare ecstasy successively with the more or less similar neuroses (nerve disorders) which are recognised in classical treatises on disease, and with those cases of affection of the nervous system which are scattered in the annals of medicine; then we shall undertake the physiological and psychological study of ecstasy.

§ 1. *Comparison of ecstasy with classical neuroses which present any analogy therewith.*

Among the neuroses recognised in science, I know only catalepsy and hysteria that have any points of contact with ecstasy.

Catalepsy is a very rare disease. Tissot thinks that scarcely one in a thousand men has seen a case: he himself, in the course of a long practice, has not met with one. 'During the years 1802-3,' says the celebrated J. Franck,¹ 'I travelled over the greater part of Europe, and amongst the thousands of patients whom I saw in the great hospitals of Germany, France, and England, I did not find one cataleptic.'

We will briefly sketch the characters of the disease. The attack is often preceded by some nerve troubles, headaches, giddiness, noises in the ears, disturbed sleep. At the moment of attack the patient is rendered immovable in whatever position he may be. When quite under its influence, both body and limbs let themselves be put in any position, as if they were made of wax, and they remain as placed. The operation of the senses is suspended; general sensibility is lost; the intellect sleeps a dreamless sleep. No means are known of rousing the patient from this condition.

¹ *Traité de Pathologie Interne*, par Joseph Franck, trad. du Latin, Brux. 1842, t. iii. p. 44.

The attack ends spontaneously, after lasting an uncertain time, varying from some minutes to several hours. On waking from the cataleptic state, its subject not only knows nothing of what has passed around him, but remembers nothing of what has passed within his own consciousness. The attack is often single; sometimes it recurs at irregular intervals. Cases of periodic catalepsy are extremely rare (XIII.).

From this description it is clear that the points of resemblance between catalepsy and ecstasy reduce themselves to two: the immobility of the limbs in a given attitude, and the suspension of the mental powers and of sensibility. But, in the first place, these two analogies are far from perfect; and, in the second place, we find in other respects clearly different characteristics. The analogies are not perfect; thus, in the cataleptic, the body remains, all through the attack, in the attitude in which it was surprised; it resembles a marble statue. Louise Lateau, on the other hand, raises her eyes to heaven, clasps her hands or extends her arms; she kneels, she rises, she falls prostrate. If she be like a statue, it is a living one.

In catalepsy the body retains of itself a given position; whilst, when Louise is raised from her seat, she falls back again as soon as she is left unsupported. During the whole of a cataleptic attack the limbs assume without resistance, and retain without change, any required position. We have seen that in the ecstasy, on the contrary, during the prostration, when the limbs are extended in the form of a cross, they cannot be displaced without force, and as soon as they are left at liberty they resume their position.

More decisive differences are to be observed in the other phenomena. In catalepsy the intellectual powers are in abeyance, like those of the senses. On recovery the patient remembers nothing of what has happened during the attack, and often resumes his occupations precisely as he had left them. The attack is a sort of void parenthesis in his life. We have seen, on the other hand, the activity possessed by

the intellect of the ecstasica, and how accurate is her recollection on awakening.

Finally, nothing can arouse the cataleptic; whilst Louise is obedient to the call of certain persons. Here I add, in order to complete the comparison, that the cataleptic attack is often a single one; and that if it does recur, it is at irregular and often prolonged intervals, while the ecstasy of Louise recurs every Friday with perfect regularity.

Hysteria is a protean malady. Its manifestations are many and varied. 'It is not one complaint only,' the elder Rivière used to say; 'it is a whole volume of complaints.' To increase the confusion, most medical men have adopted the convenient custom of grouping under hysteria all the strange and ill-understood neuroses which they meet with. It is natural then to inquire if this vague affection does not hide in its obscurities the explanation of the ecstasies of Louise Lateau. This question is not so difficult as it at first appears. When hysteria is attentively studied, we can soon distinguish, amidst its chaos of symptoms, characteristics as definite as those of any other malady. These are its essential features, and form, as it were, the groundwork on which the thousand caprices of hysteria picture themselves.

Let us try to sketch these essential features.

In hysteria there are two distinct things: there is the ordinary state of ill-health, sometimes not very evident, but always appreciable to a physician practised in diagnosis—this we will call the hysterical habit; and there are also symptoms, usually of a convulsive character, which show themselves suddenly and end also suddenly, and are generally of short duration—these are the hysterical attacks. The specific characteristics of the hysterical habit must be looked for in the causes which produce it, in the changes undergone by the mental or moral state of the patient, in certain disorders of the bodily sensibility, of the powers of movement, or of the secretions. Take, first, the causes: the hysteria of young girls is almost always either hereditary or due to a faulty education. In half the number of cases, hysteria

is hereditary. I do not mean by this that half the number of its subjects have had an hysterical mother. The 'nervous' constitution undergoes various transformations under the mysterious influence of generation; an epileptic mother or an insane father often has an hysterical daughter. What is found then, generally, in the parents of hysterical subjects is a morbid sensitiveness of the nervous system; this is the general proposition. Sometimes even the nervous constitution shows itself clearly only in collateral branches: a sister is hysterical, or else a brother is idiotic or insane. This is what is called in medicine, though improperly, collateral hereditary tendency. There is no real hereditary transmission, for we do not come from a brother or sister; but yet these collateral evidences are important as showing a family tendency. When the girl has not received the germ of hysteria in the blood of her race, the disorder is almost always the result of her education or of her mode of life. 'If,' says an eminent living pathologist, 'children are not taught to control themselves, if their least wishes are always complied with, if they are allowed to give way to extravagant grief for a broken plaything, if parents are afraid to punish when the children give way to violent fits of despair and anger, when they stamp their feet and roll on the ground on account of the least disappointment or refusal, then they are very likely to become hysterical. Accustom them to be conscientious, to be industrious, and to control themselves; do not let growing girls spend all their day in sewing, or such-like occupations, which allow them to abandon themselves to thinking and dreaming. Keep them from the bad books which excite their imaginations, and you will have taken the best means to keep off the danger of hysteria.'²

As to the moral condition, two features characterise hysteria: it is very impressionable, and very changeable. The slightest causes, which scarcely ruffle healthy minds, agitate and unsettle them; by turns they cry without grief,

² *Elém. de Pathol. Int.*, Niemeyer, ii. 357.

laugh without joy, are carried away without reason. Medical men who have written best on hysteria have set themselves specially to illustrate this point. 'Most hysterical persons,' says Georget, 'have shown from childhood a melancholy, impatient, excitable, irritable, susceptible character.'³ 'The hysterical patient,' says M. Briquet, 'has been from her childhood very impressionable, very easily affected; so sensitive to reproach, as to feel stifled and ill from it; so accessible to pity, as to weep bitterly at the slightest tale of sorrow. This characteristic is so distinctive, that there is scarcely one hysterical person in twenty who does not show it.'⁴ Another feature in this malady is the exaltation of physical sensibility. Impressions which glide off from a well-balanced nervous system annoy and irritate the hysterical; a flash of lightning, a strong odour, an unexpected noise, make them faint away; neuralgic pains almost infallibly attack them. There are three regions which in them are almost always seats of special pain. 'Every hysterical person,' says M. Briquet, whose authority should always be referred to on this subject, 'either has had or has still one, or oftener two, or all three of the following hyperæsthesiæ:⁵ pain at the epigastrium, so intense that frequently the pressure of the finger through the linen is enough to cause an acute expression of suffering; pain, almost equally characteristic, at about the level of the middle of the false ribs; or, lastly, a painful spot in the course of the spine, especially towards the left side.

'Another symptom peculiar to hysteria is a very great tendency to spasms.'⁶

³ *Rech. sur les Mal. Nerv., et particulièrement sur le Siège, la Nature, et le Traitement de l'Hystérie et de l'Hypochondrie.* Paris, 1821.

⁴ *Traité Clin. et Théor. de l'Hystérie*, 1859.

⁵ By hyperæsthesia is understood the exaggeration of the ordinary sense of feeling, so that it becomes painful.

⁶ By spasms are understood involuntary and irregular muscular contractions, and such may occur wherever there are muscular fibres. Thus, at the heart, where they become palpitations; at the stomach, where they are called cramps; in the limbs and body, where they take the form of

‘These morbid contradictions may show themselves in many organs of the body: thus the hysterical patient often complains of stifling at the throat, as if a hand were compressing the neck, or as if a ball were rising up to it and choking her; she has feelings of suffocation, palpitations, cramps at the stomach, quiverings, startings, and restless movements of limbs. Let us note lastly, as a characteristic trait of the hysterical habit, a special change in certain excretions; there is one particularly which becomes abundant and limpid to an extraordinary degree; it is no longer an organic fluid escaping from the system—it is spring water, clear and copious.’

Such is the group of marked symptoms which make up the hysterical habit; it remains to describe the acute at-

The attack usually induced by a palpable cause, such as a strong emotion, is almost always preceded by some warning symptoms (*prodromata*), especially by an uneasy feeling at the epigastrium, choking, or the sensation of a ball rising; soon the patient utters a shrill cry, or a hoarse inarticulate sound, and falls in an unconscious state. The loss of consciousness is not usually complete; most frequently the surrounding persons are heard, though confusedly; at the same time the convulsive action commences. Of this Monneret has given a very exact description, which I will borrow: ‘The convulsions are a mixture of clonic and tonic spasms; there are successively contractions and relaxations of the muscles; hence hysterical movements are so sudden, so changeable, and also so violent. Upper and lower limbs move in every direction; flexion, rapid extension, rotation, adduction, abduction succeed each other with a rapidity almost inconceivable to any one who has not witnessed an hysterical attack. The body and the head move in a similar

quiverings, startings, or convulsions. In pathology two kinds of spasms are distinguished, tonic and clonic: in the former, the muscular contraction is permanent, so that the affected part is fixed in a certain position; in the latter, there are alternate contractions and relaxations, so that violent and irregular movements of the part occur.

irregular manner, and in the most different directions. When the hand is passed over the contracted muscles, they are found extremely hard. The strength exerted by these patients is so great, that several strong and healthy persons can scarcely hold a young and delicate girl. The body writhes like a worm, draws itself together, springs, and often gets away from the hands that restrain it. During these disordered movements the different joints are heard to crack. . . . The arms are doubled over the body, and at the beginning of the attack the hands are instinctively carried to the neck, which they grasp violently in order to remove the obstacle to the entrance of air, and to overcome the frightful spasm which possesses all that region. When the hands are not guarded, they strike the face or breast, or seize the hair or tear at different parts of the skin.

‘The face is swollen; some temporary contractions occur in one or more muscles at long intervals. The jaws are close-pressed against each other, or move so as to cause mumbling or the grinding and chattering of the teeth.

‘The neck and chest muscles contract spasmodically, and there results in the former region a considerable swelling, which interferes with the circulation. The tonic contraction of the inspiratory muscles hinders the entrance of air.’⁷

Having now traced the chief characteristics of hysteria, we are in a condition to solve the question which we proposed, viz. Is Louise Lateau hysterical?

And first, we can easily satisfy ourselves that this young woman has none of those characteristics which constitute the state which I have called an hysterical constitution. She has not inherited any neuropathic disposition. Neither her father, mother, nor sisters have ever suffered from any nervous affection whatever. Then, she herself has received a severe education, tempered by the sober affection of her mother. In her character there is no sentimentality, no caprice. Hers is rather the soul of a man under the form

⁷ *Compendium de Médecin pratique*, par L. de la Berge, ed. Monneret et L. Fleury, Brux., 1844, t. iii. p. 49.

of a woman ; always calm and like herself, she supports hard labour, fatigue, and insults with quiet courage. There is no exaggerated physical impressionability about her. I have satisfied myself by repeated examination that she has none of those *hyperesthesies* of the epigastrium, the side, or the spine which Briquet describes as the special mark or seal of hysteria. She knows nothing of vapours or spasms ; has no hysterical rising as of a ball in the throat, no uneasy movements or twitchings of the limbs. Her secretions are normal.⁸

After stating this contrast between the case of Louise Lateau and the symptoms of hysteria, it is hardly necessary to inquire whether her ecstatic crises may not be attacks of hysteria. For it is an established fact in the history of this malady, that everybody who is subject to attacks of hysteria has of necessity that morbid disposition which I have called an hysterical constitution. In fact, these attacks are nothing else but striking and passing exaggerations of their habitual condition. Now, we have just shown that Louise Lateau is completely exempt from this hysterical condition.

Moreover, what kind of analogy would it be possible to find between one who is the subject of hysterical convulsions, twisting and rolling herself about in painful contortions, and an ecstasica, with her calm figure, almost transfigured (so to speak), and her movements full of a noble and religious dignity?

There is one objection which I foresee and would anticipate. I have already said that doctors are apt to group together under the title of hysterical accidents all unusual nervous affections. Wise men will be found to say that cases of hysteria are sometimes to be met with in the form of ecstasy, hallucination, &c. I allow the objection, though I must add that it has not yet been proved that facts of this kind have any real connection with hysteria. However, on every hypothesis it cannot be denied that such cases stand

⁸ Appendix IV.

outside the normal form of classic hysteria, as described by all who have devoted themselves to the study of this disease. They are altogether exceptional facts, which it will be more logical for us to examine in that part of our work which is devoted to the examination of rare cases.

§ 2. *State of ecstasy compared with the rare cases of neuralgia which bear some resemblance to it.*

Besides the cases of neuralgia that I have mentioned, there exists another series of facts equally connected with the pathology of the nervous system, but of a character so strange and obscure that they have been rejected by normal science, and formed into separate groups under the name of 'occult sciences.' This century, perhaps more than any other, has been attracted by these mysteries. Magnetism, table-turning, and mediums have each in their turn been the objects of eager curiosity.

We know that at all times the human mind has had a taste for the marvellous. One may say that man, during his earthly pilgrimage, has an attraction for mysteries like certain travellers, who, when exploring the peaks and precipices of the Alpine regions, feel drawn towards the ravines. Whence comes this singular attraction? I think it belongs to the very constitution of human nature. The soul, created for the infinite, finds itself cramped in a limited space, and must from time to time rebound towards the infinite. For us Christians, revelation, which has enlightened the world for more than eighteen hundred years, satisfies the desires of our souls, and opens out to us a prospect as vast as our aspirations. It is not as yet the fulness of light, but it is a radiant dawn illuminating the vast horizon and heralding the sun in all its splendour. But many persons in our days shut their eyes to this divine light, and refuse to be guided by any light except the precious but insufficient one called reason. Nevertheless, they soon feel the want of a more extended illumination, and seek for it everywhere except

from its only true source. Thus it comes to pass that so many who proudly reject the Gospel revelation receive with docile faith the revelations of mesmerism, or *spirit-rapping*. I am aware that many earnest men, even amongst pure rationalists, have not been carried away by these things; but it is an established fact that the occult sciences find their adepts chiefly in the world of unbelievers. I need not say that it is not my intention to write the history of the occult sciences in the nineteenth century, but the discussion I have undertaken will not allow me to pass them over in silence. On the one hand, we find at the bottom of these strange doctrines some real phenomena; on the other hand, these phenomena have been called up not only to account for the facts at Bois d'Haine, but to interpret by mere reason facts that the Church declares belong to the supernatural order.

To furnish a clue in the labyrinth of the occult sciences for those readers who are uninitiated in such matters, I think it advisable to give a short account of their origin and their development in the nineteenth century.

In 1766, a young man, native of Suabia, Antony Mesmer, read before the Faculty of Medicine at Vienna, as an inauguration thesis on taking his degrees as doctor, a dissertation on the *Influence of the Planets on the Human Body*. In it we find the first rudiments of magnetism. After having made some noise in Germany, Mesmer was banished from Vienna, and established himself in Paris, where he excited for about twenty years, that is to say, till towards the middle of the French Revolution, a fever of curiosity and scientific controversy. According to Mesmer, there exists a subtle fluid, universally diffused, which acts powerfully on the human body, and which the physician can at his will, and by various means, direct, accumulate, or disperse. The analogy which he believed he had discovered between this fluid and the fluid of the magnet made him decide to give his doctrine the name of 'animal magnetism,' which it has retained. The effects that Mesmer pro-

duced on his patients were various—shivering, yawning, bursts of laughter or of crying, fainting fits, or various forms of convulsions. This was the art in its infancy.

It was not long before magnetism entered into a new phase. In 1784 the Marquis of Puységur discovered ‘magnetic somnambulism.’ Under the influence of the magnetiser the subject falls into an extraordinary sleep, of which we shall have to speak later. Henceforth the fundamental outlines of animal magnetism remained fixed, and the successors of Puységur can only develop some accessory points of the new doctrine.

Animal magnetism did not meet with any encouragement from medicine in France, especially from the medical faculty. In England, a certain number of men of high standing and earnest minds applied themselves perseveringly to this study. Amongst them we must mention Dr. Braid of Manchester. It was in studying animal magnetism that he made, in 1841, the discovery of an important physiological fact. He proved that phenomena could be produced analogous to magnetic phenomena by a very simple means, namely, the gazing steadily for twenty or thirty minutes at some bright object.⁵ To this collection of facts he gave the name of hypnotism.⁶ Some physiologists designate it, in honour of Braid, by the name of Braidism, others call it nervous sleep.

Connected with hypnotism, from which they spring, are certain phenomena which are known by the strange appellation of *electro-biology*.⁷ Their origin is as follows :

The discovery made by the Manchester doctor soon crossed the Atlantic, and in America met with a general, and one may say official, reception, for J. B. Dods was permitted, at the request of seven members of the Senate, to expound the principles of hypnotism before the Congress of

⁵ Braid has recorded his discovery in a work he published in London, 1843, under this title : *Neurypnology, or the Rationale of Nervous Sleep, considered in relation with Animal Magnetism*.

⁶ From *ὑπνος*, sleep.

⁷ Synonyms : *electro-dynamy, biology, suggestion, boullito-dynamy, &c.*

the United States.⁸ These singular phenomena captivated to the highest degree the inquiring and enterprising minds of the Americans, who contributed very much to their development. Dr. Philips, who was travelling at that time in America, brought back into Europe this hypnotism, more or less changed, and under the new name of electro-biology.

The means used to produce the biological phenomena are analogous to those used by Braid. Philips made the patient fix his eyes for twenty-five minutes on a metallic disk; he then made a certain number of passes on his forehead, and gave his orders with considerable emphasis. Henceforth the subject has no will but that of the biologising doctor; he obeys the most eccentric, and I may add the most degrading, suggestions; his sensations are perverted, he is given up to the most extravagant hallucinations, he loses even all consciousness of his own personality, and, at his *master's* will, believes himself to be transformed into a wild beast or some unclean animal.⁹

When once got thus far, the adepts of the occult sciences knew not where to stop, and they were seen rapidly falling into the superstitions of ancient magic. One of the most ardent propagators of these cabalistic doctrines,

⁸ Consult the work entitled the *Philosophy of Electrical Psychology*, New York.

⁹ These lamentable aberrations have led to great excesses. In 1853, in Spain, in the province of Toledo, a certain man, called Manuel Blanco Rimasanta, was accused of repeated assassination and of anthropophagy. He made a full confession, and declared that for thirteen years he had been the victim of a curse, which had changed him into a wolf: driven by this kind of fatality, he had committed many murders, and eaten the flesh of his victims. The counsel for his defence tried to prove that he was labouring under homicidal monomania; but the six doctors who examined the case put aside this plea, and Blanco was sentenced to death. Thereupon Philips tried to interpose. Looking upon the Spanish man-eater as a *biologised* subject, he wrote to the ministers of Queen Isabella to beg for a delay of the execution; and, to prove his assertion, he offered to go over to Spain at his own expense, and to develop before any commission which they might select the instincts of anthropophagy upon subjects taken by chance. This proposition did not lead to any result (see *El Clamor Público*, July 16th, 1853, and the *Journal de Magnétisme*, t. xii. p. 445).

Dupotet, has made the following solemn declaration : ‘ There is no longer’ (he writes in the *Journal de Magnétisme*) ‘ any doubt, any uncertainty ; magic has been rediscovered.’ The Church, the guardian of the rights both of reason and of human dignity, long ago foresaw that men, by following certain real facts not yet sufficiently elucidated, would easily be led away into error and immorality. So that one is not surprised that as early as the year 1841 she should have addressed to Catholics warnings, since then several times repeated, to caution them against these dangers.¹⁰

Here I might stop. The other branches of this modern cabal have not a shadow of resemblance with the facts of Bois d’Haine. However, as in our days arguments have been deduced from these obscure phenomena against anything divinely supernatural—arguments which, though futile, have impressed certain minds precisely on account of their mysterious character—I think it may be useful to complete this sketch of the history of the occult sciences in the nineteenth century. Moreover, it will be easy for me to be brief. The facts of which it remains for me to speak are nearly all summed up in *spiritism*—at least there they all terminate.

¹⁰ We may well imagine that the danger of the occult sciences lies not only in the fact that they drive from the soul light and truth, to fill it with error and superstition, but they also strike, so to speak, at the very constitution of human nature. Their fatal effects may be summed up in a few words. They upset the organic functions, and seriously compromise health. They weaken the mind ; and they pervert the affections, and open the door to immorality.

It is easy enough to foresee, *à priori*, that it is impossible for the delicate and tender organisation of man to be subjected with impunity to such violent action, the result of which cannot be calculated, by reason of the profound obscurity which still surrounds it. I have noticed that those persons who stand best the influence of magnetism—that is to say, who meet with no evident ill effects—contract a most special nervous susceptibility. Rostan, a man of authority, says : ‘ I have known magnetism to cause general indisposition, acute pain, obstinate headaches, violent heart-burn, momentary paralysis, a general shaking of the nerves predisposing to all kinds of nervous affections ; also excessive fatigue, great debility, extreme emaciation, suffocation, asphyxy, and I have no doubt that death may result from it’ (*Dict. de Méd.*, 1^e éd. 1825, t. xiii.).

Spiritism, which is nothing but the evoking of spirits,¹¹ has recently made its appearance in two ways—spirit-rapping and table-turning. The account of the appearance of spirit-rapping in America is thus related by some of the initiated: In 1846, Michael Welckmann, who was living in the village of Hydesville, in the county of Wagne, in the United States, heard one evening some one knock at the door of his house. He went to open it, but saw no one. These strange noises were unceasingly repeated, upon which Welckmann left the house. After him it was occupied by a family of the name of Fox, which consisted of the father, mother, and two young girls—Catherine, aged fourteen, and Margaret, who was twelve. The unusual noises which had

With regard to the mind, the dangers are more serious still. Man can never transgress with impunity the rules which Providence has laid down for the exercise of his faculties. It would take me too long were I to relate the history of all the crimes and suicides caused by magnetism and spiritism. Victor Hennequin, one of the apostles of the superstition of spirit-rapping in Europe, wrote one day to a journal of the sect to say that his wife, whom he had employed in his operations, had been so disturbed in her mind in consequence of this, that she was obliged to be placed in a lunatic asylum. Soon after, he himself ended his life in the same place.

The American papers have for the last twenty years used a special form for registering the crimes and suicides owing to spiritism. The *Boston Pilot*, one of the most influential journals of the United States, says that most of the mediums become haggard, idiotic, mad, or senseless; and that the same happens to many of their followers. Not a week passes without our hearing that some poor creature has committed suicide or been taken to a lunatic asylum. The mediums often show most unmistakable signs of their being actually possessed by the devil. The evil spreads rapidly, and will no doubt, in a few years, produce the most frightful results (No. of June 1st, 1852).

As to morality, the respect I owe to the reader forbids me to expatiate any farther on the subject. A serious writer—one who sincerely believes the occult phenomena, but who judges them with calmness—says: ‘Magnetism has enriched debauchery with resources which were unknown to Hellogabalus’ (Morin, avocat, *Du Magnétisme et des Sciences Occultes*, 1860, p. 313).

¹¹ Here I merely give the doctrine of the spiritists. Of the many facts which they relate in their journals, reviews, and books, it is not for me to distinguish what may be attributed to illusion, what to juggling, or what to actual necromancy.

determined Welckmann to leave the house were soon renewed. At one time it was like the blow of a hammer on the door, at another time like the cracking of a whip. The new occupants of the house were at first alarmed, but at last became accustomed to these strange disturbances; and one night, in the month of March 1848, Mrs. Fox ventured to question the authors of these mysterious knocks:

'Who makes these noises?'

No answer.

'Is it a departed spirit?'

One knock.

'Is it an unhappy spirit?'

One knock.

'What age is my eldest daughter?'

Fourteen knocks.

'And my youngest daughter?'

Twelve knocks.

Mrs. Fox, much alarmed, hastened to tell her husband of this conversation; he, in his turn, told their neighbours. In less than half an hour numbers arrived at the haunted house. The spirit, again questioned, declared that five years ago, during his human life, he had been murdered in that very house; he gave his name and that of the murderer. This event caused great excitement. The Fox family left Hydesville and settled in Rochester, a neighbouring town, where ere long the same phenomena made their appearance and attracted a large crowd.

From this time dates the revival of the old art of necromancy, and, under the name of *spiritism*, spread in a few months all over America, and drew the attention of clever men. A detailed account of these strange facts may be seen in a petition addressed to the American Senate, and signed by fourteen thousand persons, amongst which appear the names of many of the most distinguished persons in the country. The petitioners being all Protestants, and consequently having no other authority to appeal to, as well in religion as in politics, except the legislative assembly, ap-

pealed to it for a solution of the mystery which was perplexing them.

Almost at the same time, both in Europe and America, spiritism appeared under another form, namely, table-turning. It is not known exactly how it originated. Certain it is that in the beginning of the year 1853 reports of strange phenomena were circulated in Europe; a certain number of persons, placing themselves round a table, upon which they laid their hands, so as to form a complete chain, caused the table to rotate. Tables were soon questioned in the same way that Mrs. Fox had questioned the walls on hearing the mysterious knocks. The tables answered by striking a certain number of times on the floor. At last they were made to write by having a pencil fixed on to the foot. It was remarked that some persons were more promptly obeyed than others, and these were charged with the questions. They acted as interpreters to the spirits, and therefore were called mediums. The mediums have now done away with all this apparatus. They directly question the spirits and receive their answers, which they transmit to their hearers.

Such is the brief account of the occult sciences in our times.

Whatever opinion we may form with regard to this medley of real facts, juggleries, and diabolical evocations, it is evident that in the magnetic and hypnotic phenomena alone there can be found any traces of analogy to the state of ecstasy. I will therefore only consider the two last-named classes of phenomena.

But I must preface this with a few words on another fact of the physiological order, namely, natural somnambulism. I am obliged to call your attention to it, because, on the one hand, it has been made use of to explain the state of ecstasy, and because, on the other hand, it forms the connecting link between normal science and the occult sciences.

Natural somnambulism is a kind of dream put into action. Persons are known, in their sleep, to perform cer-

tain acts which require at one time the help of some of the senses, together with great accuracy in the movements; at another, great attention and a certain coherence of ideas. In this singular state, some of the senses, besides remaining fully awake, and supplying the soul with impressions to be worked out, will even acquire a certain power far superior to that which they possess in their normal state. Thus a somnambulist will perceive sounds which are altogether lost to those around him; or again, amidst the darkness of the night, will ascend fearlessly to the most dangerous, and often most picturesque, heights. Whilst the activity of one or two of the senses is thus greatly increased, the others may be totally benumbed, and as it were paralysed. For instance, it is not unusual to find somnambulists insensible to either cold or heat, or puncture of the skin. Lastly, there is another disturbance of the senses, namely, hallucination. Besides the real and often most clear impressions received from those senses which retain their activity, the somnambulists often experience subjective sensations or hallucinations which are as strong and perfect as the real sensations.

This twofold phenomenon of increased activity in some senses, whilst the others remain powerless, is also to be found in the intellect. In the state of somnambulism there is a partial illumination of the mind, by which certain regions of the soul are enlightened whilst the others are left in profound obscurity. The faculties thus enlightened are usually the memory and the imagination. But these faculties have only a limited circle of operation; as a rule they are concentrated upon one object; and hence, no doubt, they derive that extraordinary power which they so often manifest in the state of somnambulism. To complete the description of the phenomena peculiar to somnambulism, it must be added, that the organs of motion, the muscles, obey with the greatest accuracy every order they receive.¹²

¹² Although somnambulism may often have been the subject both of familiar conversations and of the writings of learned men, yet, in reality,

Might not the ecstatic state of Louise Lateau be no more than a fit of natural somnambulism ?

When we compare these two orders of facts we easily discover their distinctive characteristics clearly defined.

And, first of all, the somnambulists from their very constitution are predisposed, and, if I may be allowed to say so, have a certain calling, to somnambulism ; they are mostly nervous persons and hysterical women. Perhaps the most curious case of somnambulism known is that mentioned by the doctors Archambaut and Mesnet of a woman who had as many as forty-eight hysterical fits in twenty-four hours. Predisposition to somnambulism is often known by other signs ; as when the subject, in his sleep, has habitual dreams, during which he speaks aloud or seems violent.

Louise Lateau has none of these dispositions ; she is not hysterical, she sleeps calmly.

Somnambulism nearly always occurs during the night ; and this is so characteristic of the phenomenon that many physiologists give it the name of noctambulism. Now in the extraordinary case of Louise Lateau it is most remarkable that, of the two phenomena, one invariably begins in the night and the other in the middle of the day ; but observe that it is the bleeding which begins in the night, whereas the ecstasy takes place in broad daylight.

The actions of a person in the state of somnambulism are as various as the dreams from which they result ; but in the case of Louise Lateau it is always the same scene which takes place before her, that of the Passion, in which, as her movements show, she is seen to take an active part.

The manifestations of natural somnambulism are most irregular, but with Louise the periodical regularity of her ecstasy never fails.

it is a phenomenon of very rare occurrence. For this reason, I have thought it useful, as an explanation of the subject, to mention in the Appendix a few facts selected from amongst those that bear some resemblance to the state of ecstasy (XIV.).

It is very difficult to awake somnambulists in their dream; no efficient means of rousing them are known; the crisis must cease spontaneously. But for Louise it suffices to be called even in a low voice by certain persons authorised to do so, and at once she returns to her normal condition.

Lastly, the most thoroughly distinctive characteristic of somnambulism is, that on awaking the person has no recollection of what took place in his dream. And this fact appears all the more extraordinary because ordinary dreams often leave in the soul some recollection more or less exact; nevertheless, it is a well-established fact, judging from the many theories that have been framed to account for this peculiarity.¹³ Now, on the contrary, we have seen that Louise Lateau retains the most clear recollection of the scenes that pass before her eyes during the ecstasy.

Although animal magnetism has for a long time now drawn the attention of learned men and the curiosity of the masses, yet it has not been able to obtain a regular place in science. For nearly a century has Mesmer's discovery been discussed by men of science, and nowadays the controversy goes on, not only as regards the questions of doctrine, but even as regards the very existence of the magnetic phenomena. This uncertainty perhaps might authorise us to pass by this question without noticing it. Before comparing magnetism with the extraordinary but well-established phenomena of Bois d'Haine, I might perhaps require its authentic acceptance by the scientific bodies.

I could not, however, in fairness make use of this exclusion. Indeed I myself believe in magnetism—with reserve, yet with conviction. I have studied its mysteries with all the attention I could bestow. I have not sought for information from those public exhibitions which nowadays are so much abused, but I have searched personally for evidence by making experiments upon subjects whose complete ignorance of questions of this kind was for me a guarantee of

¹³ See Alfred Maury, *Le Sommeil et les Rêves, Etude psychologique*, 1867, p. 193.

their sincerity. With the testimony of my own senses and the assent of my reason, I was forced to admit the reality of a great number of magnetic phenomena. But, in order to complete the statement of my belief, I must add that, were animal magnetism to remain in this state of obscurity so favourable to error and vice, we should have to regret that Mesmer did not carry his secret with him to the grave. Therefore I am bound to discuss the question, both for my own sake and for the sake of those readers who, with me, believe in the reality of the magnetic phenomena.¹⁴

Perhaps, some will say, we take for granted there exist facts of this kind, but up to this time they are so enveloped in darkness that we cannot institute a comparison between them and the phenomena of Bois d'Haine, nor draw from the comparison any strictly scientific conclusions. I think this objection is not solid, for, in fact, two elements of the question are sufficiently well known—I mean the essential phenomena of magnetism and the conditions required to produce them. I will proceed to explain these, and then we shall easily ascertain whether both these essential phenomena and the conditions necessary to produce them are to be found at Bois d'Haine. The only condition which is truly indispensable to cause the development of the magnetic phenomena is the presence of a magnetiser. The magnetiser uses his influence over the subject in very different ways—mostly by *passes*, that is, by slowly passing his hands before the patient without touching him; at other times simply by gazing intently upon him. Sometimes he acts upon the patient by means of some material object, which he places in contact with him; but in this case the results are very doubtful, or at least very insignificant. Finally, many magnetisers pretend to be able to act upon their subject at a distance, and that not only when they have nothing but a partition between them, but also when they are at unlimited

¹⁴ If the question of animal magnetism still meets with many unbelievers amongst the representatives of contemporary science, we must not forget that the reality of the fundamental phenomena is admitted by men whose authority is unquestionable, such as Laplace, Cuvier, Arago, and even Rostan, Andral, Orfila, Bouillaud, and Calmeil.

distances from each other. This idle pretence finds its refutation in most conclusive experiments. The celebrated report made in 1847 by Bailly sets forth a number of facts which go to prove that magnetisers placed out of sight of their subjects have never been able to lull them to sleep.¹⁵

Let us pass on now to the explanation of the magnetic phenomena.

After a certain length of time, varying from a few seconds to half an hour or more, the person under the influence of magnetism falls profoundly and calmly asleep. The time required for causing the magnetic sleep varies according to certain conditions, which are not all known. It is certain that the oftener a subject has been magnetised, the easier he is magnetised. If the first time it required half an hour to send him to sleep, the twentieth or hundredth time it will only take a few minutes, or even seconds. Women are more easily magnetised than men, especially those who are nervous, hysterical, &c. Still, it should be remarked that many persons resist this dangerous influence. I have calculated that two-thirds of the women and nine-tenths of the men are able to baffle the power of a magnetiser, if they have ordinary good health, a well-balanced nervous system, and offer firm resistance. As a rule, when the person magnetised is left to himself, he enjoys a calm sleep for a few hours. But if the magnetiser retains his influence over the subject and goes on to complete his work, then it is that strange phenomena may be witnessed.

Certain senses acquire a wonderful development: the mesmerised subject can hear at a certain distance conversations held in a low voice, and perceive the smell of odours arising afar off; his sight becomes so keen that it is diffi-

¹⁵ This report was drawn up by the famous Mayor of Paris, who, moreover, was a clever physician, in the name of a commission selected by the government from amongst the members of the faculty of Paris and of the Academy of Sciences, in order to examine the question of magnetism. Besides Bailly, we find in this commission other celebrated men, as Franklin, Lavoisier, and Darcet. The question of mesmerising from a distance being of some importance in studying the problems of Bois d'Haine, I shall quote in the Appendix (XV.) the principal experiments of the commission.

cult to calculate its limits. Whilst some of the senses are thus endowed with greater activity, others are struck powerless. It is common enough for the skin and other membranes to become quite insensible. This insensibility may be carried to such a degree as to allow the patient to undergo the most cruel operations.¹⁶ This is what we notice as to the senses. As regards the movements, they remain free, unless the magnetiser has recourse to some special craft by which he causes greater or less activity in certain muscles. In fact, the magnetiser has it in his power to affect any member with momentary catalepsy or paralysis.¹⁷

Let us now examine the modifications that take place in the moral being of the person.

The chief phenomenon is the excitement of certain intellectual faculties, and especially of the memory and the imagination. Things which seemed quite forgotten are brought back to the mind with singular clearness; thus instances are known of persons saying by heart long passages of poetry, of which they have no recollection when awake. The imagination also is strongly excited; but, as in its normal state, it remains a capricious faculty, liable to a thousand errors. With regard to the affections of the soul, the principal fact is that the subject receives almost passively the impressions

¹⁶ J. Cloquet, a surgeon, was the first, I think, who tried successfully a painless operation of a serious nature on a mesmerised lady. Such facts have become more numerous since. In 1845 and 1846, in Calcutta, Dr. Esdaile performed 161 painless operations of different kinds upon subjects made insensible by magnetism. These facts were verified by a commission appointed by the Governor-General of India (*Natural and Mesmeric Clairvoyance, with the practical Application of Mesmerism in Surgery and Medicine*, London, 1852).

It would be well to notice that these operations were performed, for the most part, upon Hindoos. Their soft and nervous temperament accounts for the results which could not be obtained in the same proportion with Europeans.

¹⁷ These phenomena are not of rare occurrence, neither are they without danger. Dr. Charpignon relates an instance of a lady in whose case the magnetiser amused himself by paralysing any member at his wish. On awaking, she remained speechless; and it was with the greatest difficulty she recovered the power of speaking. He also gives the case of another person who, on recovering from her magnetic sleep, was paralysed in the right arm. She remained in that state for several days, and only recovered after an energetic medical treatment.

which it pleases the magnetiser to communicate ; so that he becomes the slave and property of the magnetiser, sees no one but him, hears no one but him, and blindly obeys him.¹⁸ What makes this power of the magnetiser all the more to be dreaded is that the subject, on awaking, has lost completely all recollection of what happened in his state of somnambulism. This forgetfulness is an essential characteristic of magnetic somnambulism, and one that never fails. Such are the ordinary phenomena belonging to the magnetic state.

One of the more advanced schools, that of transcendent magnetism, pretends to develop phenomena of a still more extraordinary nature, which they class under the name of lucidity. In this condition, we are told, the subject sees through opaque substances, or again at immeasurable distances. Independently of the eyes, he can use his sight by means of different points of the body, as, for example, the epigastrium or the occiput ; he is said to speak languages which he never learnt, to see in the past facts which were never thoroughly known to him, and to be able to read through the future. What is to be thought of these assertions ? The facts brought forward by the transcendent magnetisers must be divided into three classes. There are false facts, real facts, and suspicious facts. The first class contains the facts proved to be false. They are very numerous ; some are mere juggling, others are badly-interpreted phenomena.¹⁹

In the second class I place a small number of facts, which seem to me not to go beyond the natural order ; such, for example, as certain facts of seeing through bodies said to be opaque, of seeing the past or the future.

¹⁸ It is to be observed, however, that a third person may be placed in *relation* with the subject. As a rule, it is the magnetiser who establishes this relation. Another means of communication is simply to hold the hand of the mesmerised person.

¹⁹ Not wishing to bring into this discussion any gratuitous assertions, or to protract this work indefinitely, I refer the reader to the Appendix (XVI.) for the facts of fraud and the deceitful phenomena of which the annals of magnetism are full.

Many bodies that are called opaque admit of the passage of certain vibrations of light, which, however, are too feeble to make an impression on the retina, or, at least, such an impression as is required for clear sight. The eyelids, for instance, which we are wont to consider as opaque veils, are far from offering a complete barrier to rays of light. Let a person shut his eyes completely in a dark room; yet, if another enters with a light, he is immediately made conscious of it by a certain indistinct glimmering; in other words, some rays of light have certainly passed through the eyelids. The opaqueness of bodies is, then, a relative term—relative to our power of seeing. An example will make my meaning clearer. Crystal is the most perfectly transparent body that we know: a mere piece of ice interposed between our eyes and any object allows us still to see that object almost as clearly as though we were looking at it without anything at all intervening between it and us. But if you put ten pieces of ice, one on the other, the clearness of your sight is sensibly diminished. Put a hundred, and you can scarcely any longer distinguish the outlines of the object. Nevertheless, if any means were given us which increased a hundredfold the seeing power of the retina, we should see just as clearly through a hundred layers of ice as through one. Now, it has been shown that an excessive activity of the senses is one of the best-established facts of the magnetic state. There is nothing unreasonable, then, in admitting certain facts of vision, more or less distinct, through bodies usually accounted opaque, and particularly through closed eyelids.

Modern science supplies other hypotheses also, which may one day explain certain phenomena of vision which to us appear to exceed the powers of nature. 'Spite of twenty-four centuries of study, observation, and research, the subject of our senses is far from being yet exhausted. . . . Not all men see by means of the same rays; most marked differences in this respect may be found in the same individual in different nervous conditions. Of the heat-bringing

rays, it is possible that what are dark rays to one man may be luminous rays to another, and *vice versâ*. The heat-bringing rays pass freely through certain *diatherman* substances—substances which have been heretofore called opaque, because they do not transmit any ray which is only ordinarily luminous. *Diatherman* bodies allow the free passage of those rays of light which constitute one man's light; they arrest other rays which make another man's light. Herein, perhaps, lies the true explanation of some phenomena of which no probable account has ever yet been given.¹ In the present condition of our knowledge, it is impossible to draw the exact line, in this class of facts, between the possible and the impossible. On this point, then, we must be content to remain in that prudent state of doubt which the illustrious *savant* recommends whom I have just quoted.

So much, then, for the power of seeing through opaque objects. As to the power of seeing into the past, we cannot justly appreciate facts of this kind without bearing in mind the power of memory which is characteristic of many somnambulists. It is possible that under the influence of magnetism facts may revive with all their freshness, which they may have known indeed before, but of which, in their waking state, every trace of recollection may have seemed to be lost. Of course it cannot be admitted that, according to any *natural* law, their faculties can transcend these limits. The question also of seeing the future, which is claimed for magnetised persons, suggests precisely analogous reflections. Man, even in his normal condition, enjoys to a certain degree the power of foresight. Thus he can foretell with certainty future facts which depend on the invariable laws of nature. Even in facts which belong to the domain of free-will he may arrive, if not at absolutely certain predictions, yet at presentiments more or less exact, if only he take account of all the circumstances, and specially of the intellectual and moral qualities of those agents who have to do with the subject-matter of his anticipations. Now, we

¹ Arago, *Œuvres complètes*, t. ii. p. 312.

have seen that the intellectual powers of some somnambulists receive an extraordinary degree of activity. It is possible, then, that their power of foresight may be raised to a degree far above the ordinary level, and that they can sometimes penetrate into the future so far as to excite our utmost astonishment.

I come now to the third class of facts, those which I have called suspicious. Persons who have busied themselves with the question of animal magnetism in a spirit of perfect sincerity, and with the most upright intentions, tell us that certain subjects, under the influence of magnetic practices, talk in languages of which it is absolutely impossible that they should ever have learnt a single element, relate facts known only to the interrogator, and predict with certainty contingent events. I know not what to say as to the reality of facts of this kind. There is generally a flavour of fraud or of error about them. Nevertheless, if any new documents should hereafter be produced which oblige us to admit their reality, I proclaim at once most emphatically that such facts are not natural. Magnetism, spiritism, and the other occult sciences, which many educated men look upon as only different branches of one and the same doctrine, border very closely on the supernatural world, and they may, without any considerable deviation, enter into it altogether.

In order to draw a parallel between magnetism and ecstasy more easily, I must say a few words on the various theories which have been put forward to account for the production of the alleged facts. First, as to Mesmer's hypothesis of universal fluid, this has been abandoned even by the Puritans, who were the most faithful preservers of the great master's tradition. Secondly, many modern magnetisers (this is their modern name), whilst rejecting the theory of a universal fluid, admit a private or particular fluid in each individual, analogous to, if not identical with, the nervous fluid. They hold that everybody has this fluid, and can project it out of himself and accumulate it on somebody else, in whom the magnetic phenomena are thereby pro-

duced. And this theory is perhaps the least improbable of those that are in vogue. Another theory is, that the phenomena are dependent solely on the will of the magnetiser. Our will, it is said, has the power of acting on our own organs; under certain conditions, it can go beyond its own habitual domain and act directly on the organs of another. This hypothesis, however, involves a gratuitous assumption, and may be refuted by this single consideration, that our will cannot certainly produce in another more than it can produce in ourselves. Now, we certainly cannot magnetise ourselves. A certain number of modern authors allow that spirits, either good or bad, have something to do with the matter; and I have already explained under what exceptional circumstances I should be myself disposed to accept this hypothesis. Lastly, there are others who set down the whole magnetic science to the account of the imagination of the person magnetised. But they are met at once by a fact of very frequent occurrence, viz. the magnetising of a person during his natural sleep, or when he is in a state of disease without any self-consciousness. The reader will have observed that one thing is common to all these theories;—they all require a magnetiser; this is the one only point on which all who are well versed in the matter are agreed.

We are now in a condition to be able to approach the question we proposed; for we are now in possession of the two terms of the comparison, the ecstasy of Louise Lateau, and the conditions and phenomena of magnetism. The question is, whether, when Louise escapes so suddenly from common life, becomes a stranger to all that is going on around her, insensible to the most energetic stimulants, buried in the most profound contemplation, at one time immovable, at another taking part by her attitude and gestures in certain scenes passing before her soul—whether she is not at these times merely suffering under an attack of magnetic somnambulism.

In strict logic, it would be sufficient to settle this ques-

tion at once, that we should prove the entire absence, in the present case, of the condition necessary for the production of the magnetic state—I mean the presence of a magnetiser. Where is the magnetiser in the cottage of Bois d'Haine? There have been a few persons who have adopted the idea of magnetism as the cause of the ecstasy of Louise, and these have not given way before this difficulty. They have said—and I must needs follow them on their own ground—the magnetiser is the curé of Bois d'Haine. All who enjoy the acquaintance of M. the Abbé Niels will not be able to suppress a smile at this idea, so alien to his character, which is precise, severe, and by no means inclined to mysticism. I will add, however, for the removal of all doubts, that the curé is scarcely ever at the house when the ecstasy begins; sometimes he is engaged in the performance of his religious duties in the parish church, which is two-thirds of a mile off; sometimes he is visiting the sick, or he is travelling. Even if one were to admit the foolish idea that magnetism may be produced at a distance, still a sufficient proof that it is not so produced here may be given in this fact, that I have seen the ecstasy begin in the morning or be resumed in the course of the day, at various hours which could not be foreseen and prearranged, and when M. Niels was absent. Numbers of others also have been witnesses of that same fact. I need hardly say anything, I think, about the mother and sisters of Louise as possible magnetisers, seeing that they too are sometimes absent, at other times engaged in work most alien to such an idea, when these extraordinary phenomena are manifested.

The essential condition of magnetism then being altogether absent, this theory might very justly be considered to be exploded. Nevertheless, to complete the subject, I will add a brief comparison between ecstasy and the magnetic condition, though I fear it will necessarily involve some wearisome repetitions.

The first effect of magnetism, when well practised, is

to plunge the subject of it into a profound sleep ; the eyes are closed, so that it requires a certain effort of the fingers to separate the eyelids ; the muscles are in the same state of relaxation as during natural sleep. If the action of the magnetiser does not go beyond this, ordinarily no other effect is produced, and some time afterwards the subject awakes. But Louise Lateau does not sleep ; or if any one chooses to insist upon calling her ecstasy a nervous sleep, at least he must acknowledge that it differs entirely from the magnetic sleep ; the eyes are wide open, riveted on certain mysterious scenes ; the body and limbs, instead of being relaxed, actively assume various attitudes, corresponding to the visions which she sees.

Whilst the magnetiser remains *en rapport* with the subject, the state of somnambulism is complete, or, if the magnetiser so wills, aggravated ; there is a certain increase of power given to some of the senses, such as the sight and hearing, and a certain lethargy of the others, especially of the touch ; rarely, however, is there complete insensibility to pain. In this particular, too, Louise offers a most singular exception ; in her the insensibility is complete ; none of the senses is over-excited, all alike are in a state of lethargy.

During somnambulism thoughts crowd upon the mind in numbers and in great variety ; the affections fluctuate ; the memory is excited and the recollections of the past revive with great force. When the magnetic sleep is over, the patient cannot recall anything of what passed within him whilst it lasted. In Louise, the reverse of all this takes place. She is enveloped in light ; neither the past nor the present has any existence for her ; she assists at the scenes of the Passion, and her soul is completely absorbed in this contemplation, which is always the same. On coming out of the ecstasy, she has a precise remembrance of what she has seen, and can recount it in all its details.

The somnambulist renders blind obedience to the mag-

netiser, answers all his questions, as well as those of all others who are put *en rapport* with him. Louise does not speak at all during the ecstasy, nor answers any question, no matter who it is that asks it.

Only the magnetiser can awake the subject from his nervous sleep, and he does it, not by a simple command, but by some magnetic manœuvre which is not always the same. Louise can be recalled from her ecstasy in a moment by a single word of anybody who has jurisdiction over her.²

We come next to the question of nervous sleep, or hypnotism, which was discovered, as I have already said, some thirty years since by Braid of Manchester. It has a very close relationship with magnetic somnambulism. Most recent writers on the occult sciences have expressed themselves as greatly rejoiced with Braid's discovery. They have even pretended that it furnishes the natural and physiological explanation, not only of the mysteries of magnetism, but also of all the extraordinary facts which belong to magic and mysticism. They consider that all that is marvellous in these facts vanishes before this important discovery. But I confess I do not understand how these claims can be seriously maintained. For, first, there are certain clearly-defined differences which separate the facts of Christian mysticism from the facts of magnetism or magic, and these differences Braid's discovery does not destroy. And, secondly, even if it be true that it is possible, merely by looking at some bright object, to produce phenomena analogous to those which magnetisers produce by passes or by the fascination of their steady gaze, nevertheless does this contemplation of a bright object explain the phenomena that are produced one whit more physiologically than the passes themselves or the fixed look of the magnetiser? The only really important fact in this matter,

² It is no part of my duty to study this phenomenon of the *rappel*, as I have already explained elsewhere. I only mention it here in order to point out the complete contrast which there is between ecstasy and a state of somnambulism.

so far as it concerns us, is this : that a man can produce in himself phenomena resembling those of magnetism by his own unaided efforts, without the intervention of any other person whatever. Let us see, then, whether this does not supply a simple and adequate explanation of the ecstasies of Louise. To do this, we must first examine the means required for producing the nervous sleep, and, secondly, its essential phenomena.

We have already seen that the means proposed by Braid consisted merely in the prolonged contemplation of some bright object. A small mirror, or ball of polished metal, was placed before the patient's eyes, at the distance of fifteen or twenty inches ; he is ordered to fix his gaze upon this object ; and, at the end of twenty or thirty minutes, or sooner in the case of those who have undergone the experiment before, hypnotism is produced. What are its characteristic phenomena ? The fundamental fact is a drowsiness, more or less profound. The exercise of the senses is modified ; in most cases, the sensibility of the skin is blunted ; in a few instances, it is almost destroyed, so far at least as to render the patient insensible to any prickings he may receive.³ The other senses are in like manner deadened, much the same as in natural sleep ; with the exception, however, of the hearing, which is often raised to an unusual degree of power, so that the patient hears the questions addressed to him, even in a low voice, and answers them. As for the muscular system, the limbs are sometimes in a state of relaxation, as in sleep ; sometimes, on the contrary, it has been shown that they are in a cataleptic condition, so that the limbs will retain for a certain time whatever attitude is given them. As to the intellectual condition of the patient, I have already said that he answers questions ; his answers are generally sensible, calm, and without any token of excitement ; his thoughts are often

³ MM. Demarquay and Giraud-Teulon, who have made a careful study of hypnotism, have only established this fact of insensibility once, and that was in the case of an hysterical woman.

confined within a very narrow circle. Dreams and hallucinations are very easily produced, and the subject readily receives whatever suggestions it may be desired to impress upon him. Such are the phenomena which the most recent studies warrant us in considering the characteristic traits of hypnotism.⁴

One important observation yet remains to be added, which is this: that it has been proved that neither the brilliancy of the object to be gazed at nor its position at a certain fixed distance, or in any definite line, is a condition indispensable for the producing of hypnotism. The nervous sleep may be produced by fixing the eyes attentively on any fixed point for a certain length of time.⁵

Having thus examined into the phenomena and characteristics of hypnotism, we are in a position to answer without difficulty the question we proposed to ourselves—viz. Is Louise Lateau a subject of hypnotism? In order to answer such a question in the affirmative, we must first admit that a young and ignorant girl has made the same discovery as Braid. Even if these phenomena had been better known than they are, it is ridiculous to suppose that they can have been communicated to Louise by any of her *entourage*. But let this difficulty pass. I would next remark that here also, as in the case of magnetism, the indispensable condition for producing it is completely absent. Let the reader refer for a moment to the description I have given of the beginning of the ecstasy. Sometimes the girl is at prayer; sometimes, in order to obey the injunction she has received of resisting the attack of the ecstasy, she

⁴ Consult the work of Dr. Braid, already quoted; the article on Sleep in Todd's *Encyclopædia*; the Dictionary of Nysten, recast by Littré and Robin; *Les Elémens de Physiologie* de Béraud; a work of M. Azam in the *Archives de Médecine* of January 1, 1860; and especially *Les Recherches sur l'Hypnotisme*, by MM. Demarquay and Giraud-Teulon, Paris, 1860.

⁵ It is very probable that the phenomena of hypnotism are facts *recovered* rather than *discovered* in our days. The fakirs and dervishes of India, the jugglers and sorcerers of Egypt and the East, are acquainted with this singular secret. See Appendix XVII.

is directing the movements of her sewing-machine, or else she is giving herself up to familiar conversation, and all of a sudden she is rapt in ecstasy. There has been no gazing at any object whatever, whether bright or dull. Her looks have been wandering to and fro, from one object to another, as naturally as possible. I have often watched her most attentively, and really, if I did not feel bound to maintain the utmost gravity in this discussion, I should be disposed to say that, of the two, the doctor is more likely to fall into hypnotism than the girl, pertinaciously keeping his eyes fixed upon her with suspicion for half an hour at a time.

Besides, the phenomena of hypnotism have but very imperfect points of resemblance with the phenomena of ecstasy. In the one case, the senses are only blunted; it is quite an exceptional case if there is complete insensibility; the hearing is specially acute; the subject answers questions proposed to him; his dreams and hallucinations have infinite varieties. In the other case, Louise Lateau is absolutely insensible; instead of her hearing being preternaturally acute, she is deaf to the most startling noises; she has never answered a single question put to her by any bystander whatever; her visions always set her in the presence of the same religious scenes; she awakes instantly at the call of any person having jurisdiction over her. We conclude, then, from the study that we have made, that hypnotism offers no solution that can be accepted of the facts to be seen in the humble cottage of Bois d'Haine. And I believe I may claim to have proved that the phenomena to be observed in Louise Lateau cannot be attributed either to natural somnambulism, magnetism, or hypnotism.

There remains yet one more objection, which I think is of a sufficiently serious character not to be left without a reply. It may be said, 'The domain of the occult sciences is still full of obscurities and mysteries. Granting that you have proved all that you say, yet still who knows what

revelations in science the future may have in store for us? Who can say that it is impossible to produce, by causes at present unknown, other nervous conditions, more or less like those which have now been passed in review, and during which the senses might in like manner receive a considerable increase of power? Such an increase in the powers of sight and hearing would suffice to explain the most marvellous phenomena of the ecstasy, and in particular her awakening at the call of those having jurisdiction over her, and the emotion she manifests on coming into contact with any objects that are blessed. She does not see or hear in the ordinary way, but by some extraordinary nervous faculty perhaps, hitherto unexplained. She distinguishes by intuition, as it were, whether the person who seeks to recall her to herself has, or has not, jurisdiction over her; she therefore obeys the one, but is insensible to the voice of the other. In the same way she distinguishes the objects that are brought near to her lips; she venerates those that are blest, and remains insensible to the touch of those that are not.

Such is the objection that might be raised; and I have done my best to give it its full force. Anybody who is at all initiated in the study of extraordinary *neuroses* (nerve diseases) will at once understand that if I left such an objection unanswered, there would be a very grave omission in this treatise. I feel bound, therefore, to do what I can to clear away this doubt. But in subjects so imperfectly understood as these are, it is not argument that has the greatest weight; we can only appeal to facts. I will choose one only, the most extraordinary of all certainly, and one which would be absolutely incredible if it were not established by irrefragable testimony.

The reader will immediately see that the fact I have selected belongs to an order of facts which I promised not to discuss, because they belong primarily and specially to the domain of theology. Let me defend myself, therefore, by a word of explanation. I do not propose to draw from

the fact I am going to relate any theological conclusion whatever. I only introduce it here because it throws great light on the objection drawn from the phenomena of *clair-voyance*, which those who uphold the theory of the occult sciences as explaining the facts of Bois d'Haine are continually urging against us. With this word of apology, I proceed to narrate my fact. I take it from the reports written by two eye-witnesses; the one, one of the most eminent statesmen of our country (M. Deschamps); the other, Monsignor d'Herbomez, Bishop of British Columbia beyond the Rocky Mountains. This venerable prelate has passed twenty years of his life in evangelising the savages, in the midst of very cruel privations and unceasing dangers. His knowledge is equal to his piety and his apostolic zeal. I have already had occasion to mention⁶ that this Bishop, having obtained permission to see Louise Lateau, was admitted into the cottage on Friday, August 13, 1869. He was accompanied by M. l'Abbé Mortier, Rector of the College of Bavay. Let me briefly remind my readers that they found the young girl busily engaged in directing the movements of her sewing-machine. Blood was flowing abundantly from her feet, hands, side, and all round her head. The Bishop entered into conversation with her, and was questioning her visions. She answered in her ordinary quiet manner, but with perfect intelligence. Presently the machine stopped all of a sudden; the girl's hands remained motionless, and she was in an ecstasy. The Bishop and his companion followed the various scenes of this ecstasy all through the day, and have described them in their report; but they need not be repeated here, as the reader is already familiar with them. They tried several experiments with relics and other blessed objects. About ten o'clock they were joined by the parish priest, on his return from administering the last sacraments to a poor old woman in the neighbourhood. It is necessary to explain that country priests in Belgium sometimes carry the Blessed Sacrament

⁶ See page 26.

and the holy oils in two separate compartments of the same silver vessel; that is to say, the two parts of the vessel may be separated at will, and the part which contains the Blessed Sacrament is called the *custode* (in England, the *pyx*); but ordinarily they are united, and this double vessel is carried from place to place in a silken burse. As the curé had communicated the sick woman with the only Host which the *pyx* contained, he supposed—and so also did the Bishop and his companion—that there was now nothing in the sacred vessel but the holy oils; otherwise they would not have dared to break the laws of the Church by making the experiment I am going to relate.

It occurred to them to try what would be the effect upon Louise of bringing her into contact with the vessel containing the holy oils. The effects which followed were so extraordinary, that they thought it necessary to call a fourth witness. And it was in this way that the eminent statesman I have spoken of, whose country-house was close by, was begged to come to the cottage of Bois d'Haine. The facts I am going to tell took place in his presence, and I will here, simply as an historian and not as a doctor, copy his report word for word, with which that of the Bishop exactly coincides in every detail; they are both lying open before me :

‘M. l'Abbé Mortier’ (the experiment was made by the Bishop and the Rector alternately) ‘wished to present the box of holy oils to the lips of Louise. When he was about two yards from the chair on which she was sitting, she experienced an extraordinary movement of most lively emotion and a transport of gladness. She got up, and fell suddenly on her knees in an attitude of adoration, her hands joined, starting forward and stretched towards the sacred vessels; her figure was quite seraphic. The Abbé retired a little, but still retaining the blest object in his hands, and she followed him as he slowly withdrew. She seemed to be half kneeling, half standing, leaning forwards with her hands clasped; she looked like one drawn by a

magnet, and as though she was gliding rather than walking. In this way both the Rector and the Bishop made the complete circuit of the room; whenever they stopped, she fell on her knees and adored. When they got back near to her chair, they withdrew the sacred vessels to a distance from her, whereupon she sat down, returned to her previous state of immobility, and the usual scenes of the ecstasies were continued as on other Fridays.

‘Monsignor d’Herbomez thought that some particle of the Blessed Sacrament must be still remaining in the pyx without the knowledge of the parish priest, who perhaps had not had time to make the usual purification of the sacred vessels. To satisfy himself on this point, he separated the two parts of the vessel, and then offered the part which contained the holy oils to Louise. He found that he could do this without causing her to make any unusual movement; and even when he touched her lips with it, she only gave a gentle smile, as she does whenever she comes in contact with objects that are blessed. But when he presented the other portion, or pyx, even at the distance of two yards from her, the whole scene which I have just described was repeated—the kneeling, the adoration, and the transports of delight. They left the cottage five hours later, and all four went together to the parish church, where the Bishop opened the pyx in the presence of the other witnesses, and they found that a considerable particle of the sacred species had been left in the sacred vessel.’

Such is the fact, affirmed by men whose testimony is above all suspicion, and it may be added that there were three other witnesses also, the mother and two sisters of Louise.

In thinking over this very wonderful fact, one objection continually presented itself to my mind. I know how strongly the partisans of magnetism are disposed to believe in the reality of the phenomena of clairvoyance, however improbable; and I considered that they would certainly claim for

Louise an exceptional degree of that power; they would say that she had recognised the sacred vessels in their usual covering of silk, and that she had even seen, by means of her exceptional powers of clairvoyance, the holy oils in their silver box, and the fragment of the Host in the pyx. This doubt has certainly no great claim to be considered as a scientific doubt; nevertheless, I was anxious to remove it, and I therefore asked for another experiment by way of counter-proof, and it was made under the following circumstances. On Friday, November 19, 1869, at nine o'clock A.M., the parish priest, accompanied by Canon Halley, a distinguished professor of the seminary of Tournai, entered the cottage of widow Lateau. Louise was already in her ordinary ecstasy. The priest had brought in the same silken burse as before a little silver vessel exactly like the pyx, and in it was an unconsecrated Host. Here, then, was the very same outward apparatus (so to speak) as Monsignor d'Herbomez had held in his hands on the former occasion. I said to myself, therefore, 'If Louise is a clairvoyante, she will recognise those things which are used for the administration of the Sacraments to the sick; she will see the burse, the pyx, and even the Host that it contains. She will immediately believe that the Blessed Sacrament is here, and we shall have a repetition of the scenes of adoration which have been already described.' The parish priest offered the vessel to Louise, but she made no manifestation, no transport of joy, no act of adoration; she remained absolutely insensible and immovable.

Thus it is demonstrated that the fact of August 13, attested by the Bishop of British Columbia and his fellow-witnesses, was no phenomenon of somnambulic or hypnotic clairvoyance, or of any other nervous affection whatever. This conclusion is most strictly logical, and it is not my province to draw any other conclusion from the fact I have narrated; that must be left to theologians, who will study the same phenomena from another point of view. For myself, it only remains, for the completion of this study, that

I should examine the question of ecstasy from a medical point of view.

§ 3. *Medico-psychological study of ecstasy.*

When two mountains are separated only by a narrow valley, there gradually accumulates in it a number of objects detached from their sides, and the traveller who passes by knows not from which of the two slopes they have rolled down. This comparison comes to my mind as I enter upon the study of ecstasy. It has been said of man that he is a little world, a *microcosm*. We might more truly say that he is the union of two worlds. In him body and soul meet upon an undefined frontier, where a multitude of obscure and difficult questions are crowded together—mixed questions depending at the same time upon the various sciences which are concerned in the study of man, and more particularly upon theology and medicine.

Ecstasy is one of these questions, and there are few more delicate. The first difficulty which presents itself is the very definition of the state. What is ecstasy?

Etymology gives us no precise information respecting the signification of the word; it only seems to indicate that in this extraordinary state the soul is taken out of its normal condition.⁷

The best course to follow, in order to decide the question, will doubtless be to inquire what is the precise signification attached to this expression by the two orders of learned men who have studied the point, theologians and medical men. I am thus led to make a short digression upon the domain of theology.

Theologians give a very precise definition of ecstasy. They all consider this state to have two essential characteristics. The first is, the concentration of all the powers of the soul upon one single object; the second is, the sus-

⁷ Εκ, out of; *στασις*, state.

pension of the exercise of the senses. These two elements are found in all the definitions of ecclesiastical writers, from the Fathers of the Church down to contemporary theologians.

Ecstasy, says St. Augustine, is a transport by which the soul is separated, and as it were carried away, from the senses of the body.⁸ St. Bonaventure says that ecstasy is an elevation of the soul to that source of divine love which surpasses all human understanding, an elevation by which it separates itself from the outward man.⁹ St. Thomas gives a descriptive definition, which I can only just mention here on account of its length, but which agrees on all points with those just quoted.¹⁰ Finally, nearer to our own time, Cardinal Bona says that ecstasy is a transport of the soul, by which the exercise of the exterior senses is so much impeded, that not only they no longer act, but they are even unable to act, or to be excited by the objects which would naturally affect them.¹¹

Moreover, all theologians distinguish between a natural ecstasy, a divine ecstasy, and a diabolical ecstasy.¹²

⁸ L. ii. ad Simplic., q. 1, in Ps. lxvii. 30.

⁹ *De Grad. Contempl.*, t. 7.

¹⁰ *Summ. Theol.*, 1, 2, quest. xxviii. art. 3.

¹¹ *Du Discernement des Esprits*, by Cardinal Bona, translated by M. T. A. D. H., 1840, p. 237.

¹² This at once carries us far away from the assertions of a member of the Institute, M. Alfred Maury: 'Theologians,' says he, 'have regarded ecstasy as one of the most signal favours ever granted by the Creator to a creature. Thus the greater number of those who have experienced it have been placed by Rome amongst the saints' (*Le Sommeil et les Rêves*, &c., p. 231). When treating of divine ecstasy, theologians distinguish an ecstasy of the understanding and an ecstasy of the will. In the first, the soul is so completely absorbed in the contemplation of the *true* or of the *beautiful*, that it remains as if suspended and withdrawn from the empire of the exterior senses. The ecstasy of the will is produced when the soul, carried away by the charms of an object which appears *good*, goes as if out of itself to unite itself with this object. It would be an error to believe, with M. Maury, that the Church always considers ecstasy as a miracle, even when it has for its object God or some holy thing. Theologians say that God can give to a soul special graces to raise it to contemplation or to the love of supernatural objects. This contemplation or this love

The ideas of medical men with respect to this extraordinary state are less precise and less concordant. Some simply take up the definition of the theologians and describe, under the name of natural ecstasy or of ecstatic nervous disease, the state of which the characteristics have been traced by ecclesiastical authors under the name of mystical ecstasy. 'It has been discovered,' says M. Alfred Maury, 'that ecstasy or mystical ravishment is the effect of a nervous disease of a special nature, and the nervous disease itself has been described under the name of ecstatic state.'¹³ That is to say, they simply suppress supernatural ecstasy; they no longer recognise in mystical ecstasy anything but a nervous disease. It is thus that Bérard proceeds in France. 'Ecstasy,' he says, 'is a vivid intensity of certain ideas, which so completely absorbs the attention that all exterior sensations are suspended, all voluntary movements arrested, and the vital action itself is frequently impeded.' He cites as types the ecstasies of St. Teresa.¹⁴ In Germany the illustrious Franck gives a similar description. 'Ecstasy,' he says, 'is a profound contemplation, during which the patients remain motionless, the senses do not act, although there is no appearance of sleep; the gestures, words, and songs indicate divine visions, an intimate communication with angels or demons.'¹⁵ Most contemporary medical men give a far more extensive signification to the word ecstasy. Bertrand, whose authority is often appealed to in these questions, has united the most distinct conditions under this title.¹⁶ In our

inclines the soul to ecstasy; and the ecstasy, if produced, is then a natural effect of a supernatural cause. There is an active concurrence of the subject. This ecstasy is not reputed miraculous. In the process of canonisation it is admitted simply as a sign of holiness. The Church considers as a miracle (of the third order) the ecstasy in which the soul is ravished suddenly, without previous meditation or contemplation, the subject being purely passive.

¹³ Work already quoted, p. 228.

¹⁴ *Dict. de Méd. et de Chir. Prat.*, art. 'Extase.'

¹⁵ *Traité de Pathol. Interne*, art. 'Extase.'

¹⁶ *Du Magnétisme Animal en France, suivi de Considérations sur l'Extase*, Paris, 1826.

own time, a doctor celebrated for his study of lunacy, Brierre de Boismont, has enlarged this synthesis still more. According to his view, ecstasy is a phenomenon of nervous excitability which is to be met with in the Pythonesses of antiquity, the initiated in the different mysteries, the famous sects in the Middle Ages, the possessed, those subject to convulsive fits, the illuminated, the mystics, in some patients afflicted with madness, hysteria, catalepsy, &c.

It is impossible to accept this synthesis as the final decision of science. Not only are the facts of a supernatural order thus blotted out with a single stroke, but considering the matter from a purely medical point of view, no attention is paid to the progress which the pathology of the nervous system has made in our days. We might just as well, setting aside the light that percussion and auscultation have thrown upon diseases of the chest, class the greater part of these affections together under the name of cough or catarrh. I cannot therefore accept the union of phenomena so numerous and so distinct as constituting a pathological entity to be designated by the name of ecstasy. However, since I am obliged to follow the doctors upon the ground which they have chosen, it becomes necessary to study these various cases under the name of *ecstatic states*. And upon considering this question we shall soon recognise that these states may be distinctly divided into three species.

The first includes the ecstatic manifestations which result from disease of the nervous system. Amongst these diseases there are in fact many which are accompanied by a diminution or suspension of the exercise of the senses; this is, as has been already said, one of the two characteristic elements of ecstasy. If the intellectual activity continues, if the patient has hallucinations, the second element becomes realised; the disease is clothed in an ecstatic form. These two conditions are met with in numberless nervous diseases; we will review them briefly, and it will be seen that most of the cases related by various authors under the name of ecstasy belong to this category.

The affections of the nervous system most frequently accompanied by ecstatic manifestations are mental derangement, catalepsy, hysteria, natural or magnetic somnambulism, and hypnotism. It may cause some little astonishment to find magnetic somnambulism and hypnotism ranked amongst diseases; there is not, however, a single earnest physician who does not regard these phenomena as the result of morbid modifications of the nervous system.

Mental derangement is frequently accompanied by ecstatic phenomena. The general power of sensation is greatly affected in mad people; it is sometimes possible to prick or burn them without rousing them from their torpor. They pass whole weeks, and even months, in this state. The honour of having been the first to describe in its many varieties the ecstatic state which complicates mental derangement belongs to the late Professor Guislain, a Belgian. To show the differences which separate this morbid ecstasy from the ecstasy of Louise Lateau, we cannot do better than contrast the scene which takes place every Friday at Bois d'Haine with the sketch traced by this illustrious doctor of Ghent. He says: 'The causes, the symptoms of the disease, the connections which it presents with other mental disturbances, prove convincingly that this affection belongs to the phrenopathic class. It arises from a strong, frequently an instantaneous, impression to which the sensibility of the individual is not accustomed: some sad and unexpected intelligence which wounds our dearest interests, our warmest affections; in some instances, anger, terror, or any painful cause, provided its action is sharp and the subject endowed with a sensitive irritable constitution, may produce *hyperplexie*;¹⁷ it is a kind of shudder, a commotion in the brain, causing a cessation of the functions of that organ; it must resemble the numbness which we feel in any limb when, after receiving a blow from some blunt body, shiver runs through it and it remains powerless. . . . Women are especially inclined to this kind of madness. It shows itself

¹⁷ Hyperplexie is synonymous with ecstasy.

by a *propensity of the body to immobility*; the patient is constantly seated on a chair, leaning against a wall or lying in bed: from his immobility and his fixed eyes he looks like a statue. *By a state of muscular rigidity*; if his skin is pinched, the patient does not draw away the part that has been irritated, or he draws it away slowly. All movements of the arm are difficult, and the irritated muscles everywhere offer strong resistance. These lunatics pass whole months *without uttering a single word*; and in whatever manner you may treat them, the immobility of their features shows that they no longer understand you. A passage of Ovid, already quoted by authors to show the influence of grief upon our intellectual actions, admirably characterises the species of madness of which we are speaking. The poet says, speaking of Niobe: "Surrounded by her children and her husband, who have all perished in her sight, she remains *motionless* under the griefs which overwhelm her. The wind cannot stir even her hair; her face so wan, *her eyes without movement*, no longer show the image of life." Guérin has represented the distinguishing features of ecstasy with no less admirable truth in his superb picture of Marcus Sextus, escaped from Sylla's proscriptions. On his return he finds his daughter weeping by the side of his wife, who is dead; seated on the bed where the corpse lies, he presses his wife's hand convulsively between his own. His body is without movement, his eyes fixed and open, his face convulsed, his whole frame struck with ecstatic rigidity.¹⁸ The pulse is generally slow, the face paler than usual; the skin is cold: a more or less decided state of emaciation shows itself.¹⁹

This ecstatic state does not appear alone; it is always connected with one or other of the diseases of the mind. Guislain believed that, in some rare cases, the ecstasy

¹⁸ *Annales du Musée de Paris.*

¹⁹ Guislain, *Traité des Phrénopathies*, Brussels, 1863, p. 256 and following. Guislain has coined the new word *phrénopathie* to designate all mental diseases.

might appear as the only morbid element, but the sole instance which he quotes in support of this opinion proves precisely the contrary. 'Nothing is rarer,' he says, 'than ecstasy devoid of every other morbid character. The following case may, however, give an idea of ecstasy, considered in its most simple state. A woman named M., fifty years of age, of a delicate temperament and very sensitive disposition, was married to a man whose frequent fits of passion kept her in a state of continual fear and anxiety. Their daughter was asked in marriage by a young man to whom the father had an aversion; he opposed the marriage: scenes, quarrels, and even blows took place. From that time the mother never spoke, never moved from her chair, and never slept; in this condition she was brought to us. Her eyes were wide open, her arms crossed on her lap; she answered none of the questions that were put to her, and did not even appear to understand what was said; she could see, but did not look at anything. Upon taking her arm up, a certain resistance was felt; her pulse was slow but not weak. During two months the patient remained in this condition, and at last left the establishment cured.'²⁰

I said that this case is a proof precisely against the thesis that morbid ecstasy may sometimes exist without any other mental disorder; there is not indeed a single physician experienced in cases of lunacy at the present day who would hesitate to consider the case related by Guislain as one of melancholy.

Of all the species of mental derangement now known, there is none so frequently complicated by ecstatic phenomena as melancholy. This morbid association, designated by Georget under the name of stupidity, is now generally described by the title of melancholy stupor. The patient is mute and motionless as a statue; if he is standing and any one pushes him, he moves a few steps heavily forward, then he settles down again in his silent immobility; his power of sensation is deadened without being entirely lost;

²⁰ Guislain, work already quoted, p. 261.

completely absorbed by his grief, he is unaware of all that passes around him. Guislain relates a case of melancholy stupor, which I will repeat here because it gives an exact idea of this disease: 'Madame H. received a violent shock from seeing her husband come home covered with blood; she was unable to sleep, cried frequently, and became at the same time unfit to perform her household duties. When she was brought to our establishment we noticed in her a profound sadness; her forehead was furrowed with perpendicular and transversal wrinkles, and yet the poor woman was only thirty-one years old. She seemed afraid of everything and answered no questions; she remained whole days in the same position, her eyes wide open and her body motionless. Her look was restless and her eyes frequently filled with tears. Her pulse was quick, her face pale, and the extremities were cold.'

At other times it is in the course of a mania or monomania that ecstatic symptoms make their appearance. 'Ecstasy frequently marks the highest degree of mania. The muscular and cerebral agitation gives way to a state of permanent tension. The patient, after struggling and rending the air with his screams, gradually ceases to speak; his eye becomes dim and his look convulsive. This state, which lasts days, nay months, is sometimes succeeded by returning health, sometimes by furious madness, or by intellectual paralysis.'³⁴

Leuret relates an account of a mad woman who had hallucinations which caused her to kneel down before the sun; she thought she saw God in it, and was filled with delight.³⁵ M. Baillarger published in 1858 the account of an ecstatic delirium which broke out suddenly in a young woman during pregnancy, after a strong mental emotion. She saw her husband, spoke to him, and expressed by her attitude and gestures the emotions which agitated her mind, without appearing to notice anything around her. It would be

³⁴ Guislain, p. 263 and following.

³⁵ *Fragments Psychologiques sur la Folie*, p. 344.

³⁶ *Annales Médico-psychol.*, 1858, vol. iv. p. 428.

easy to multiply instances of this kind, which all bear the strongest resemblance to each other.

We have already seen that regular catalepsy has but little resemblance to ecstasy. Still it sometimes happens that catalepsy takes unusual forms. To the suspension of the senses, which is a rule in this disease, are added the continued activity of some faculties of the mind and various hallucinations. Catalepsy thus approaches the ecstatic state. Galen long since recorded a case which looks like the first step in this direction by disease. 'A man,' he says, 'lay stretched out and stiff like a piece of wood; he seemed to stare fixedly at us, having his eyes open and not moving them in the slightest degree. He did not speak. He told us, however, when he recovered from this state, that whilst he was in it he heard what we said, although not quite distinctly and clearly. He related things which he remembered happening around him. He said he saw all those who were before him, but that he could neither speak nor move any part of his body.'³⁷ Charles Despins gives an account of a young girl of twenty who was seized by cataleptic fits every evening at ten o'clock, and remained in them from two to four hours. Every third day the fit was more violent, and was a succession of cataleptic rigidity, lethargy, and somnambulism.³⁸ Other cases of catalepsy complicated by somnambulism may be read in the work by Puel.³⁹

Hysteria, precisely on account of its Proteus-like character, is perhaps of all nervous affections the one most frequently accompanied by ecstatic manifestations.

The most singular cases of this kind have been contributed by Professor Sanderet of the Medical College at Bordeaux in 1850, and by Dr. Mesnet in 1860.

The young person whose case came under the observation of M. Sanderet was seventeen years of age, and called

³⁷ *Comment. Præd.*, 2 in lib. i. Hip.

³⁸ *Rapport Médical présenté à M. l'Intendant Général du Duché de Savoie*, par Charles Despins, Médecin des Eaux d'Aix en Savoie, *Bibl. nation. et étrang.*, t. v. p. 33.

³⁹ Puel, *De la Catalepsie*. To this *mémoire* a medal was awarded by the Imperial Academy of Medicine, 1856.

herself Alexandrine Lanoix. In the beginning of June 1850, attacks of hysteria came on, which returned twenty or thirty times in the course of the day, and only lasted a few minutes. The girl was unconscious, and in this state her movements were so violent that several persons were scarcely able to hold her. These phenomena lasted but a few days, and disappeared by the use of antispasmodics. Towards the end of July fits began under a fresh form; she slept for twelve hours, and the waking period which separated these attacks of sleep was twenty-four hours long. She announced the moment at which the fit would begin, and that at which it would end. Whilst it lasted she recited prayers and sang hymns; nothing more. At the end of twelve days this fresh morbid period was at an end. Six weeks later, in the month of October, the attacks returned, but the order of the phenomena was inverted; the fit lasted twenty-four hours, the waking period twelve hours only. During these fits she lay quietly in her bed, her face perfectly calm, her eyes closed, but the eyelids animated by an incessant movement. Soon she began, with a full ringing voice, to sing a tolerably long hymn; then she rose and stood like a statue in a kind of frame formed by her curtains.

M. Sanderet raised the eyelid, and the eye was seen rapidly shrinking from the light. He pinched the patient with considerable force, and even thrust a thick needle into her hand, but she was completely insensible to pain. In this girl there was clearly a case of hysteria with its most distinctly defined symptoms; every doctor who saw her testified to the fact. This was the groundwork of the disease. But on this groundwork a second morbid element was grafted. Whether this element was one of hallucinations, which are so frequently mixed up with cases of hysteria, or one of deception, I am unable to decide, but I own that I incline towards the latter supposition. I have received from the best source precise information respecting this case; it is as follows: This young girl, whose real name was Alexandrine Perruchot, attracted numerous visitors to her mother's cottage; she prophesied things which never

came to pass, and pretended to be favoured with stigmata which did not exist. The Cardinal of Besançon, justly suspicious when these facts were known, desired the girl to go to a convent of the Order of the Visitation at Ornans (in the department of Doubs), where she underwent an examination which terminated unfavourably. She was sent away from the convent, and returned to her family; then she went first to Paris and afterwards to Versailles. She died at this last town in a state of gradual decline in 1854.

The case communicated to the Médico-Psychological Society of Paris by Dr. Mesnet, in 1860, is still more extraordinary.⁴⁰ This girl suffered also from clearly defined hysteria; but to this were added many various phenomena of somnambulism and hallucination. This strange case, which is too long for insertion here, will be found in the Appendix (XVIII.).

Different kinds of somnambulism, natural somnambulism, magnetism, and hypnotism may all appear in an ecstatic form. We have already devoted so much space to cases of this nature that we may be dispensed from returning to them.⁴¹

It is not difficult to separate the ecstatic states of a pathological order, which we have just been considering, from true ecstasy, and particularly from that which we have observed in Louise Lateau. All those manifestations were in fact only accidental symptoms of a nervous disease; behind these accidents we always find the morbid cause from whence they have sprung. By symptoms upon which it is useless again to dwell, we recognise sometimes mental derangement, sometimes catalepsy or hysteria, sometimes the different forms of somnambulism. Occasionally even two or three of these different pathological species are united, and constitute a kind of morbid monstrosity, designated by the

⁴⁰ *Annales Médico-psychologiques*, tome vi. p. 303.

⁴¹ The reader who is anxious to be more completely acquainted with ecstatic phenomena of a morbid origin will find in the Appendix (XIX.) an indication of works in which several curious cases are recorded.

name of hystero-catalepsy, or other analogous denominations.

In Louise Lateau none of these nervous affections exist. This is the essential line of demarcation which clearly separates the pathological ecstatic states from the case seen at Bois d'Haine. Moreover, it would not be difficult to find in the very character and in the progress of these ecstatic manifestations other features of difference, which distinguish them in a most marked manner from the ecstasy of Louise Lateau. It would be wearisome, were we again to make a detailed comparison. Let us, therefore, confine ourselves to a few rapid indications.

In ecstatic states of a pathological origin, the functions of the senses are rarely suspended; they continue with various irregularities, as in mania; they are diminished, as in stupor; or they are perverted, as in many cases of natural or artificial somnambulism. If the manifestations of the intelligence continue, they are essentially unsteady, variable, and generally incoherent. It is the delirium of the intelligence, or the delirium of the sensations, according to the expression used by M. Michéa, or that of the suggestion, as in somnambulism. It frequently happens that the subject cannot be aroused from this state, and the natural termination of the crisis must be awaited; when he can be aroused it is only by active medical treatment or by special movements, as in magnetism. On awaking, the patient generally retains no recollection of what took place during the morbid act. When the crises recur frequently, they return at irregular intervals; their reappearance is often subject to the influence of easily-discovered causes.

In Louise Lateau the physiognomy of the ecstasy is entirely different. The suspension of the exercise of the senses is complete; her thoughts are absorbed in a religious contemplation which is always the same; she comes out of this extraordinary state abruptly at the bidding of certain persons; she retains the most distinct remembrance of the scenes which have passed before her; finally, the ecstasy takes place each Friday, a day consecrated by a solemn re-

ligious remembrance, and does not appear on the other days of the week.

By the side of ecstatic states resulting from disease of the nervous system we must place that ecstasy which proceeds directly from an over-straining of the powers of the soul. This species of ecstasy may be caused by several psychological processes. Let us endeavour to analyse them. We will take, for instance, a man gifted with a keen and searching intelligence. He has devoted his whole life to the search after truth, and nothing is capable of diverting him from it. He is absorbed, like Archimedes, in his solitary meditations; his mind is utterly regardless of all external noises, it is in a kind of ecstasy. But imagine this man to possess a great moral sensibility, a heart easily moved—the pursuit of truth is then not merely a scientific curiosity for him; it becomes a passion. When the truth, although still vague and shadowy, first begins to glimmer before him, he is already excited in ardent contemplation; but on the day when, casting aside her veil, she appears to him radiant and pure, he is seized with an ecstatic transport, and exclaims, with the philosopher of Syracuse, ‘*Eureka—I have found it!*’

On other occasions again, the ecstatic transport proceeds from the heart. It is the love of country, or religious enthusiasm, which ravishes the soul and makes it dead to all common thoughts and impressions of the senses. Thus we have Mucius Scævola burning his hand in the flame of the sacrifice, or the soldier defending the frontiers of his native land; he does not feel his wounds, and laughs at death.

Lastly, it is not unfrequently a passion nearer to the region of the senses, which carries the soul out of its normal paths; such is love, with its wild fiery impulses.

It is by these psychological processes that the rationalistic school of the present day explains the ecstasies of St. Francis of Assisi and of St. Teresa, and in general the ecstasies which the Church claims as belonging to the supernatural order. ‘The mystic,’ says one of the most

skilful interpreters of this doctrine, 'seeks the Divinity by a secret commerce with the invisible. He seeks for an immediate revelation within his own conscience; and to effect this, he directs and concentrates all his faculties towards the God whom he would substitute for himself in his soul. He strives to call up His image, and to make His perfection and His beauty intellectually sensible to himself. When he believes he has succeeded in his desires, and his imagination places before the eyes of his mind the figure of the God whom he seeks after, he forgets the exterior world and plunges into the contemplation of the Divine Being.'⁴²

The learned and much-to-be-regretted Gratiolet expounds the same theory, with a few reservations, forced upon him by the elevation of his mind and the Christian sentiment which continued firm within him. 'Ecstasy,' he says, 'is the empire of a fixed idea. It is the malady of mystics who are absorbed in contemplating the perfections of God. The intellectual faculties acquire such power, that one might say they were multiplied a hundredfold with reference to all that concerns the object of the mind's preoccupation. It is an attention without limits, a supernatural and triumphant aspiration. All things of earth are forgotten one after the other; the feeling of weight which holds the body to the ground disappears; the flesh is no longer a burden, and the mind soars with it to heaven; such are the ravishments so celebrated amongst the mystics.'⁴³

Such is the theory most generally accepted at the present day by the school which undertakes to explain all ecstasies and all ravishments in a physiological manner. As for me, I own that my inward sense absolutely refuses to admit this doctrine. One radical insurmountable objection presents itself to my mind with invincible pertinacity. I will endeavour to put it in words.

If it is true that a profound meditation, having for object the greatness of God or the mysteries of the Passion

⁴² Maury, *Annales Médico-psychologiques*, t. i. p. 211.

⁴³ *Anatomie comparée du Système Nerveux dans ses Rapports avec l'Intelligence*, Paris, 1857, p. 550 et passim.

of our Saviour, can transport the soul and suspend the exercise of the senses, that is to say, bring on ecstasy—if it is true that the pious impulse of the soul's affections can engender the same phenomenon—it must be admitted that ecstasy ought, with still greater reason, to be caused in certain other more ordinary conditions. For, on the one hand, there are certainly thoughts of the terrestrial order which captivate the soul more forcibly than thoughts of the supernatural order. The learned man who, like Newton, pursues the solution of a problem which may render his name immortal; the politician, meditating a combination on which the ruin or safety of his country perhaps depends; the capitalist, calculating an operation which will place him on the highest summit of fortune, or precipitate him into the ignominy of poverty—do not these men, one and all, experience a tension of mind far more energetic and more violent than the poor girl who concentrates her thoughts upon the greatness and goodness of God, or who meditates upon the Passion of the Divine Redeemer? Then again, with regard to the affections, do we not daily meet with instances of the strangest impetuosity in the case of affections which are purely human? When the ardour of the senses is united to the ardour of the soul, does there not result a half-bestial, half-human passion which terrifies us by its violence? And would not such a torrent be as well able to carry away the soul as the peaceful tide of supernatural affections?

For my part, I do not hesitate to declare in the name of true psychology—if religious meditations, or ascetic love, can by their sole natural strength ravish the soul and suspend the functions of the senses, our profane meditations and our human passions ought to be able to produce the same phenomena. But do we ever see ecstasy appear in these ordinary conditions? Good sense answers, Never. Here is a man, motionless and deprived of the power of sensation; a woman who sees nothing, hears nothing, but moves restlessly and dreams aloud—can you imagine a medical man coming to these patients, examining them, and

saying to you, 'This man is in an ecstasy, this woman is in a transport?' It would be simply ridiculous.

To sum up the whole briefly, if ecstasy could be produced by over-strained attention, by a trick of the imagination, by a strong impulse of the thoughts or the senses, it would become a common fact of daily occurrence. Medical men, who see human nature in all its weaknesses and all its mysteries, do not meet with it in our days. History has not handed down to us a single instance of it. I am well aware that Socrates is stated by Plato⁴⁴ to have been motionless for a whole day, so deeply abstracted and intent upon his thoughts was he; that St. Thomas Aquinas, dining at the table of St. Louis, abruptly exclaimed to his astonished host, 'I consider the argument decisive against the Manicheans;' but it is evidently by an abuse of language that the name of ecstasy has been given to these different states of the soul. These were learned men, profoundly preoccupied by the idea they were pursuing, but they were not in the slightest degree ecstatics. No one can doubt that it would have been needless to apply either fire or steel to these great men in order to recall them from their so-called ecstasy. Hence I conclude that true ecstasy, of purely psychical origin, independent of any disease of the nervous system, is a myth.⁴⁵ As I have no expectation that I shall make all my readers accept this conviction, I have a final observation to offer to those who persist in believing that this species of ecstasy is possible.

If any one maintains that the soul can go into an ecstasy through its own efforts, he must at least admit that a certain preparation is necessary; the attention must be gradually strained, the imagination must be excited, the heart warmed. All partisans of spontaneous ravishment acknowledge the necessity of this preparation. 'It is the excess of attention which usually brings on ecstasy,' says

⁴⁴ *In Convivio.*

⁴⁵ I must once more remind the reader that I am speaking of true complete ecstasy, that is to say, the absorption of the intellectual faculties with suppression of the exercise of the senses.

Gratiolet. 'It is an unlimited attention, a supernatural and triumphant aspiration. . . . Another means of producing ecstasy would be convulsions, songs, &c.'⁴⁶ Reviewing the conditions in which ecstasy is produced *naturally*, Maury dwells upon abstinences, macerations, ardent meditation. 'The ecstatic disengages himself from all the preoccupations of practical life; he gives himself up unreservedly to the rigours of the severest asceticism, and meditates incessantly on God. He has but one passion, the Crucifixion of his Master; he passes and repasses in his mind its mournful scenes; with each meditation he excites his imagination more and more; whilst at the same time he attenuates his body by a prolonged fast, and thus strives to call forth within himself the moving scene of the Saviour on the Cross.'⁴⁷ Now, do we see at Bois d'Haine anything at all resembling either remote or immediate preparation? Is it necessary to repeat once more what were the occupations of Louise Lateau when the first ecstasies came to her? That poor and humble life, devoted to unceasing toil, in a cottage where neither the noise of the world ever penetrated, nor tales of the marvellous, nor mystic books (which, moreover, she could not have read); that calm peaceful soul, without excitability and without enthusiasm; that piety, deep and earnest unquestionably, yet delighting in the most simple practices. Far from seeking ecstasies, Louise endeavours to escape from them; now from humility and obedience, formerly because her sick mother stood in urgent need of her assistance. Moreover, there is no scene got up. She is reciting her rosary, or working at her sewing-machine, or perhaps occupied in a conversation thoroughly foreign to the supernatural, and suddenly the beads cease to glide through her fingers, the machine stops, the conversation is interrupted—she is gone.

I now come to the third species of ecstasy. A super-

⁴⁶ Work already quoted, p. 550.

⁴⁷ 'Les Mystiques Extatiques et les Stigmatisés,' *Ann. Médico-psych.*, t. i. passim.

natural power intervenes to ravish the soul. The threshold of this domain I may not cross; it belongs exclusively to theologians, and I have no authority to explore it. Still, however, I feel no hesitation in declaring here that I sincerely believe in the reality of supernatural ecstasies. It may be established by undeniable proofs. I will mention one for the benefit of disbelievers who are sincere. Although the limits which separate the natural from the supernatural world are not always easy to decide, yet there are phenomena of so marked a character, that the mind unhesitatingly declares that they belong exclusively to the one or other of these two worlds. It will suffice to cite the elevation of a person above the ground, without any exterior means, and for a considerable time. 'If the facts of this order are true,' says Gratiolet, 'they undoubtedly constitute a miracle of a high order.' Now the annals of religion contain numberless cases of this kind. These facts have taken place in all the countries of the world; they have had millions of witnesses;⁴⁸ they have been verified in the most minute examinations, the acts of which have been handed down to us by most credible historians. Moreover, a certain number of cases of this kind are entered in public and official documents, in the processes of beatification and canonisation; and there is no tribunal which proceeds with more rigorous scrutiny than the commissions appointed in Rome to inquire into these cases. If we are to call these facts in question, we must begin by renouncing historic certainty altogether.⁴⁹

⁴⁸ To quote a single instance, how could one reasonably call in doubt the elevation of St. Joseph of Cupertino in the air, often to a very considerable height? This phenomenon, of almost daily recurrence in the life of that saint, had millions of witnesses, amongst whom it will suffice to mention Pope Urban VIII. and Frederic Duke of Brunswick, the latter of whom belonged, as is well known, to the Lutheran persuasion. It is obvious to remark that this fact is not lost in the night of antiquity; it has shown itself in the broad daylight of the seventeenth century.

⁴⁹ To sum up what has been said; I admit, as regards their origin, three species of ecstasy, which might be called by the names of nervous ecstasy, physical ecstasy, and supernatural ecstasy. If this division is compared with that of theologians who recognise two species of ecstasy,

Hitherto we have studied stigmatisation and ecstasy apart. It is almost needless to remark, that in separating these two phenomena we were rendering the task of criticism easier; but it is evident that it is an artificial division. The stigmatisation and ecstasy in Louise Lateau constitute in reality one sole and indivisible fact. They must either be rejected together as pious fables, or accepted together and explained by one common interpretation. I rejoice to render this justice to rationalistic medical men, who have interested themselves seriously in the phenomena of Bois d'Haine. Brought face to face with strange facts, difficult to interpret, but bearing every mark of authenticity, they honestly accepted them; they moreover saw that it was impossible to separate them, and they sought a cause common to both. The interpretation they give has not arisen wholly with reference to the case at Bois d'Haine. It is as ancient as the phenomena of stigmatisation and ecstasy. In our own time the learned Calmeil developed it in a work of great erudition, and applied it to explain numberless cases of this kind.⁵⁰ In Belgium, a physician who unites strong logical power with great learning (Dr. Desmeth of Brussels) has called in the same theory to explain the facts observed in Louise Lateau. I will expound this rationalistic thesis, and to preserve its full value I will sum it up in a few propositions, borrowed almost word for word from the most accredited writers of that school:

1. The subjects predestined for ecstasy or stigmatisation are usually persons predestined to nervous affections either by inheritance or by the vices of their education; their tem-

natural and supernatural (the latter being subdivided into divine and diabolical), we might say there exist two classes of ecstasy, natural and supernatural, each class comprehending two kinds. Natural ecstasy is divided into nervous ecstasy, arising from disease of the nervous system, and physical ecstasy, an incomplete ecstasy, arising primarily from a natural modification of the faculties of the soul. In this division, as in the theological, supernatural ecstasy would comprehend divine and diabolical ecstasy.

⁵⁰ *De la Folie considérée sous le Point de Vue pathol., philos., histor. et judic.*, Paris, 1845, 3 vols.

perament is nervous, excitable; often even they suffer habitually from serious disorder of the nerves; they are hysterical women or hypochondriacal men. Their constitution is weakened by fasts, macerations, and all the rigours of asceticism. It is because women possess this nervous susceptibility in a higher degree than men, that we see far more cases of ecstasies and stigmatisation in the female than in the male sex.

2. These subjects generally live in a *mystic centre*, in which books, conversations, and images before their eyes excite their religious tendencies more and more, and where the constantly-recurring examples of St. Francis of Assisi, St. Teresa, St. Catherine of Siena, &c., exercise an inevitable contagion upon their mind. It is for this reason that these phenomena almost invariably appear in contemplative orders.

3. The imagination of these persons is lively and ardent; the heart is warm, and it has not found its natural food in the tendernesses of this world. Their thoughts and affections are concentrated more and more in pious contemplation. Ecstasy begins. Now ecstasy is the complete empire of the moral over the physical; if in this state the mind dwells upon the sad scenes of the Passion of Christ, if it is filled with the desire to share His sufferings, a nervous fluxion of blood will commence from the hands, the feet, and the side. When once the hæmorrhage has appeared, it will return in all probability on Friday, because on that day the mystic preoccupation is most complete, and the sufferers are in the habit of concentrating themselves in ardent and prolonged contemplations of the Crucifixion. They thus cause the renewal of the phenomenon by the effort of a will exaggerated in a morbid manner.

At the risk of making tiresome repetitions, we must once more for an instant glance back upon the extraction and life of Louise Lateau, and upon the progress of the extraordinary phenomena witnessed in her. Is it not the reverse of the thesis I have just stated?

Louise was born of healthy parents, who were entirely

free from any nervous affections, and has herself a good constitution. She is not nervous, excitable, volatile; and we find in her neither the fits which characterise hysteria nor an hysteric constitution. Brought up in a humble cottage, always with her mother and her sisters, occupied in unceasing toil, she can scarcely read; she has studied nothing beyond her prayer-book; she has only heard the Sunday sermons of her village curé; she probably did not even know the names of ecstasy and stigmata when these mysterious phenomena appeared in her. She is simplicity and candour itself; devoid of imagination, she has a clear, simple, and straightforward intelligence. Her piety is profound, but it is the most simple, childlike piety, as far removed as possible from exaggeration. Finally, and this remark is conclusive, the ecstasy which, according to the rationalistic hypothesis, is the cause of stigmatisation, only manifested itself thirteen weeks after the appearance of the stigmata. Moreover, each Friday the stigmatic bleeding begins during the night, whilst the ecstasy does not come until towards eight o'clock in the morning.

The partisans of a pathological origin of the ecstasy and stigmatisation raise an objection of another kind. Louise, they say, has not been put under a course of medical treatment. I might reply that I have never been able to discover any disease in her. Her health, instead of being impaired, grows stronger day by day. An eminent physician said at the commencement of the phenomenon: 'If this strange disease continues; if this girl loses blood every Friday from eight or nine wounds; if she falls each week during a whole day into this alienation of the senses—she will become anæmic⁵¹ and mad.' During two years these phenomena have returned each week; she is neither anæmic, nor mad, nor affected by nervous disease. For what, then, must she be treated? Where are the symptoms to be acted upon? Can one prescribe at haphazard active remedies for imaginary diseases, at the risk of disturbing a normal organisation? Still, in order to satisfy, as far as pos-

⁵¹ ἀναιμος, bloodless.—TRANSLATOR.

sible, unreasonable demands, which, although irrational in my opinion, were yet sincere, an active treatment has been pursued, the intention, mode of execution, and results of which I will explain. In the first place, the phenomena which are witnessed in Louise Latéau returning with perfect regularity each Friday, we might endeavour to destroy this periodical regularity by scientific means. A clever and conscientious medical man administered to the girl, at my request, the strongest anti-periodical medicine known—sulphate of quinine. He gave it in large doses, and perseveringly. In spite of this powerful medicine, the hæmorrhage and the ecstasy followed their regular course. Not the slightest variation was observed, either in the periodical regularity of the phenomena, in their character, or in their intensity. On the other hand, in order to try her, the priests intrusted with the direction of her soul have pursued a decided course of moral treatment, which could scarcely have been directed differently by the most exacting rationalists. This treatment has been applied, moreover, with an energy which I was tempted, I own, to consider excessive, and with unusual perseverance, since it is still going on with some few modifications. I may be allowed, in a purely medical aim, to lift a corner of the veil which hides the theological investigation. Two learned and pious priests, chosen from amongst those who were intrusted with this inquiry, have thought it necessary to try this young girl for a length of time, in accordance with the system pointed out by experience in similar cases. They constantly tell her that she must attach no importance to the ecstasy and stigmata; that the whole may be a pure illusion; that she must constantly beg God to deliver her from them, in order that she may not be exposed to the dangers which notoriety and public curiosity might occasion her humility. They spare her neither humiliation nor severity of language. With this object the examiners order Louise to resist the ecstasy with all her power. From the Thursday she is placed under special prescriptions, having for object to keep away the ecstasy and prevent the stigmatisation. She has

to take better food ; they have even obliged her to eat on Friday, when her stomach refused all food. On that day they force her to think of other things and to drive away the contemplative ideas which might incline her to ecstasy ; she is compelled to work incessantly during the morning, when the blood flows from her wounds and renders work almost impossible ; they keep her engaged in trifling conversation, which prevents her from devoting herself to meditation and prayer. The poor girl obeys all these prescriptions with her usual candour and simplicity ; she resists, she occupies her mind with other things, she works, and each Friday the blood gushes forth at its appointed hour, and the ecstasy carries her away in the midst of her resistance.

Let us sum up this study in a few words.

1. A young girl placed under our observation presents two important phenomena : the first consists in a flow of blood which takes place every Friday, and never appears on the other days of the week, which shows itself always upon the same places, on both sides of the feet and hands, on the left side of the chest, on the forehead, and all round the head.

The second phenomenon is an ecstasy, during which the functions of the senses are suspended, and the soul assists at religious scenes of which she retains the clearest remembrance upon returning to ordinary life.

I have watched these phenomena for almost two years ; thousands of witnesses, amongst them about a hundred medical men and more than two hundred theologians, have also seen them. Their *existence* is therefore proved in the most certain manner.

2. It was not sufficient to demonstrate the reality of these extraordinary facts ; it was necessary to prove that they are genuine and true. By observing the moral conditions in which the phenomena take place, studying by the light of pathological physiology the laws which govern hæmorrhages and nervous affections, and by submitting the young girl to various tests, I have proved that the hypothesis of a fraud must be entirely laid aside.

We next sought the causes which preside over the origin of these extraordinary facts. Studying in the first place the question of hæmorrhage, I proved that the periodical bleedings of Louise Lateau belong to none of the species of hæmorrhage admitted within the regular limits of science; that they can be compared with none of the extraordinary cases preserved in the annals of medicine; and finally, that the laws of pathological physiology do not allow us to explain their cause.

Entering next upon the subject of the ravishment, I retraced the characters of those classic nervous affections which appear to offer some features of even distant resemblance with the ecstasy of Louise Lateau; and I think I have demonstrated that it is impossible to connect it with any of the nervous affections now known. I penetrated into the domain of the occult sciences; those obscure doctrines have furnished no more assistance for the interpretation of the facts at Bois d'Haine than the more honest sciences which flourish in the open sunshine. Lastly, pursuing the subject still more closely, I compared the ecstasy of Louise with the different states known by the name of natural ecstasy. It appears to me that I have furnished documents of some importance towards the solution of the problem.

I now conclude my task. I believe I have fulfilled the mission with which I was intrusted to the best of my power. I will state it once more in a few words. I was requested to study the stigmatic and ecstatic phenomena at Bois d'Haine, and to assure myself of their reality; to bring forward the teachings of medical science respecting diseases which cause hæmorrhage and nervous affections united to ecstatic manifestations; and to seek amidst the archives of the same science any cases which present some analogy with these extraordinary facts. I have done my best to accomplish this programme and not to go beyond it.

The question cannot be fully elucidated by medical men alone. It is, in truth, one of those middle questions, if it is allowable thus to express it, only one side of which can be illuminated by our science, the other being fully turned

towards the kingdom of theology. In our day there is a much-to-be-regretted divorce between medicine and theology; and I must acknowledge here the misunderstanding does not arise on the side of the theologians. They honestly claim our help in the study of these mixed problems; but medical men will not easily tolerate them as fellow labourers, even on this neutral ground. I cannot understand this jealousy and mistrust. Doubtless, if the mind of man were more vast, there would be but one science, because there is but one truth shining forth in manifold manifestations. But our powers are limited, our sight is weak, and life is short. Let us therefore freely allow other labourers to clear the soil of science by our side; we shall not find it give way beneath our feet; and our united efforts and united fatigue will not be too much to make the truth spring up and bring forth fruit.

MY LAST VISIT TO LOUISE LATEAU.

Friday, 14th March 1873.

I SHALL now relate, in detail, the visit I have just paid to Louise Lateau. The reader who has taken the pains to peruse this work will have seen this extraordinary person as she was in 1868 and in 1869; in the rapid sketch I shall now make, she will be pictured as she is five years afterwards.

I had not announced my visit to any one. On Friday, the 14th of March, at ten minutes to twelve, I arrived at the station of Manage; a quarter of an hour afterwards I was in front of Louise's cottage. Nobody was near the spot. No one comes at that hour, because all are aware, long since, that no visitor is admitted before the commencement of the ecstasy.¹

It is still the same quiet silent little cottage; the same look of decent, almost gladsome, cleanliness; the walls are carefully washed stone-colour; the little window-panes sparkling in the sunshine of spring. Curtains of common but spotless muslin cover them completely, save where between them the mignonette and geraniums show their branches loaded with flowers.

At twelve o'clock I tapped at the window to make myself known. I am allowed to enter immediately. The family, seated around the table, were taking their frugal dinner of coffee, bread, and eggs. I find the mother looking older and thinner, but her face shows no alarming wasting away. The two sisters, Rosine and Adeline, are just as ever; slightly delicate, calm and smiling. A girl,

¹ Long since, for the religious welfare of Louise, ecclesiastical authority has required that no one should be admitted to the presence of the young girl on Fridays before she is in the ecstasy, and consequently unconscious of all that surrounds her. Visitors are obliged always to leave her before she returns to consciousness.

fourteen or fifteen years of age, who has worked with them for some years and forms part of the family, is there still. She completes the little household there to-day.

I hastily saluted my old acquaintances, for I was anxious to be introduced again to Louise. Let me remark here that she no longer stays with them in the one room. A generous-hearted manufacturer of the neighbourhood has had the cottage slightly enlarged. I shall not mention his name, but I may be permitted to say that he has done this good work in memory doubtless of Gregory Lateau, the father of Louise, who worked under him till his death.

Formerly the house consisted only of the ground floor, divided into two rooms; the larger serving for the kitchen and work-room, the other being the sleeping-room for all the family. Now, by extending the roof on the side of the garden, and building three low walls, they have made a sort of shed adjoining the back of the old house. This new part is divided into two rooms, leading one into the other. The larger is used for various domestic purposes. It is a kind of ante-room to Louise's chamber. This latter measures about three yards in length, and two and a half in breadth; it is whitewashed, paved with red earthenware tiles, and lighted by a little window opening on to the garden.

On entering it, the visitor perceives, on the right hand side, an iron bedstead placed along the wall, opposite to the window; above the head of the bed, on a shelf, a plaster statuette of the Blessed Virgin, and another of St. Aloysius Gonzaga; and, lower down, a bronze crucifix, brought from Rome, and which has been blessed by the Holy Father. There are also two pictures of the Sacred Face of our Lord.

On the left of the visitor is a very small iron stove, and above the stove-pipe, at the chimney, a little shelf. On it is a bronze statuette of St. Peter, and higher up hang a photograph of the Christ of Charles V.² and an

² The figure of our Lord which is known by this name in Belgium, and is extremely popular there, represents Him covered with wounds from head to foot.

Ecce Homo. Two common chairs complete the furniture.

Between the foot of the bed and the wall there is a space of more than a yard in width. It was there that I found Louise seated on her chair. She received me with her habitual frankness, showing neither joy nor embarrassment at my visit. Should the ecstasy take place at its usual time, I have still an hour and a half in which to examine and to question the young girl.

As usual, she undergoes my examination with the greatest simplicity, and replies to my questions quietly but with confidence.

First, I make myself acquainted with the general state of her health. She is just the same as in 1868; only her features are more formed. Five years ago she was a child, now she is a young woman. She is no thinner. Her flesh is firm, her complexion fresh, her skin clear. Her pulse beats sixty-eight times a minute. It is regular, compressible, tolerably full. Her breathing is quiet, her tongue fresh and clean. I ask her what she eats. Her answer is: 'I feel no desire for food; and as it disagrees with me, I have been permitted, long ago, to eat nothing.' 'So you do not eat anything at all?' 'No, sir.' Louise's sister Adeline, whom I also questioned on this subject, confirmed this fact of total abstinence.

I questioned Louise on the state of her strength. She told me that she was as well as usual; and in answer to my inquiries, she said that she continued to occupy herself with sewing and household work, and that she hoped soon to begin gardening, &c. She added, however, that she felt a slight weakness in the mornings, but that this weakness ceased after she had received Holy Communion. I also made myself acquainted with the fact that menstruation continued under the same conditions as formerly. I examined afterwards, with the greatest care, the state of the stigmata. The condition in which I found them is exactly this: blood oozes slightly from the stigmata of the right foot, those of the left are healed up. The young girl told me that her

side bleeds a great deal, but I thought it useless to make her undergo any painful verification of this fact. The four stigmata of the hands were now open, and at this moment, one o'clock P.M., from the stigma at the back of each hand a little thread of blood was trickling uninterruptedly. The bleeding must have been profuse, for the cloth which covers her hands is saturated with blood; and under the bed, beside the chair where Louise was seated, I noticed six other pieces of linen, each larger than an ordinary table-napkin. All these were much stained with the hæmorrhage. The stigmata of the forehead and of the head had, however, bled far more even than those of the hands. The blood had run down on to her shoulders and saturated her dress. I asked Louise why the floor around her chair had just been washed. She replied that the blood had run down upon it from her forehead and her head. Here let me remark that, later on in the afternoon, during the ecstacy, the curé of Bois d'Haine told me that, when he came in the morning to give Holy Communion to Louise, he had been struck by the profuseness of the bleeding from the forehead and head. The blood had spouted out upon a door that was near, and even as far as the cloth which covered the altar for Holy Communion. After my visit, an ecclesiastic of the neighbourhood, to whom I spoke of this extraordinary effusion of blood from the face and head, made this remark: 'I am not at all surprised at this circumstance. The symptoms which appear in Louise Lateau have always reference to the feasts that are kept by the Church;—and to-day we celebrate in our diocese the Feast of the Holy Winding-Sheet [of our Blessed Lord].'

But to return to the examination of the stigmata of the head. At the time I was thus occupied no blood was coming from them. The hair was still clotted together with half-coagulated blood. The face had been washed, the forehead was dry, and I observed on it only that frayed appearance, almost microscopic, which I have described elsewhere. One peculiarity I must not omit: the expression of the face and the frequent change of attitude manifested great suffer-

ing. Louise told me, in reply to my question, that she did in fact experience great pain, principally in the parts that bled.

Time had been going on during this examination. It was half-past one. We were drawing near to the usual time of the ecstasy. I began a conversation which I tried to render as indifferent as possible. I spoke to Louise of her mother, her sisters, her family affairs; she replied to my questions with her usual good sense and frankness, when suddenly she gazed upwards and a little to the right; her hands, enveloped in their bandages, moved forward, in the attitude of prayer: the ecstasy had begun. I looked at my watch; it was forty-five minutes past one. I resolved to discover immediately, by experiment, the power of sensation which she possessed at that time. With a penknife I sharply pricked the skin of her hands, neck, and face, without being able to arouse the slightest manifestation of pain, or even movement of surprise. After a time her respiration became quieter and weaker; the skin grew cooler; the pulse rose to eighty beats in a minute; the face resumed its serenity; the lips stood slightly apart, as if by a faint smile; the gaze, directed towards heaven, bespoke a sentiment of deep admiration. As to my own feelings, I admit that to me it was a real relief to think that the young girl had thus escaped from her sufferings. However, the time for other visitors had come. Sixteen or seventeen persons, among whom I observed a well-known lawyer, president of the Conseil de Discipline of a large town in the north of France, waited at the door of the cottage. They were admitted, and I made way for them, the room being too small to contain so many.

Towards half-past three I came back to complete my visit. I knew that at this time all the visitors would have quitted the house. I found Louise Lateau alone. She was stretched upon the ground, her arms extended in the form of a cross; her skin was cold, her pulse weak, thread-like. Respiration was almost imperceptible, and her insensibility complete. Convinced that I still had the power to recall her from this state, I resolved to try the experiment.

Standing in the middle of her room, while her face was turned in the opposite direction, I said in a low voice, 'Louise, stand up.' Instantly she rose to her knees; then she stood up quickly, and seated herself on the chair. The relaxation of the features was complete; she looked at me with the greatest calmness, and replied to several questions that I put to her. While speaking to me, she was wiping away the blood, which had continued to flow from her hands, and which recommenced flowing from her forehead. After a ten-minutes' conversation, I took my leave, and drew back towards the door, observing her attentively. Suddenly she raised her eyes, extended her arms transversely, and fell flat to the ground, motionless, as though nailed to an invisible cross.

APPENDIX.

I.

As I have already said in the text of this work, the periodical function took place for the first time with Louise Lateau on the 19th April 1868, that is to say, on the Sunday preceding the appearance of the first stigmatic bleeding, and ceased on Tuesday the 21st, three days before that event. The young girl's memory is very precise on this point, and it can be easily understood that she has retained this date with accuracy, since it is connected with the date of the stigmatisation, which took place five days after.

It is clear the first appearance of the stigmata cannot be connected with the first periodical hæmorrhage; the latter had taken place, and had terminated regularly, three days before the stigmatic bleeding showed itself for the first time. The same remark applies to the successive evolutions of the monthly period and of the stigmatic hæmorrhage. The physiological flux returns very regularly with Louise Lateau every twenty-seventh or twenty-eighth day; it lasts three days and is of moderate abundance.

The most simple calculation will suffice to prove that most frequently the physiological flux cannot coincide with the stigmatic bleeding, but that occasionally, seven or eight times in a year, this coincidence will take place. I have observed the stigmata in these two different conditions,¹ and have proved that the coincidence or absence of the monthly period had no kind of influence upon the regularity or the abundance of the stigmatic bleeding.

II.

Diseases of the hæmorrhagic class, as well as 'nervous' diseases, are frequently connected with hereditary influence. We have given sufficient proofs of this when studying, amongst other diseases, hæmophilia (p. 60) and hysteria (p. 103). The reader will understand therefore that I have attached serious importance to the inquiry into the

¹ I have twice witnessed the stigmatic hæmorrhage and the monthly period coincide.

hereditary conditions of this girl. From positive information I am assured that the parents of Louise had not the slightest disposition to either hæmorrhagic or nervous diseases. Her mother has never even suffered from undue hæmorrhage after childbirth—a time when this so frequently happens even to the most healthy women.

III.

The two sisters of Louise have never had any kind of hysterical disease. With both the periodical function is regular; with the eldest from the age of eighteen, with the second from the age of sixteen.

IV.

There is common both to men and women a certain function for the relief of the body, which is ordinarily repeated four or five times a day. Louise does not seem on Fridays to be subject to this necessity of our nature. It has been ascertained within my own knowledge, on more than twenty occasions, by the most careful watching, that this function has not been performed during the whole day. I have often stayed in the little cottage till the evening, after the ecstasy has been over, and have never noticed any exigency of this kind. I should add also, for my medical readers, that the discharge when made is of a strictly normal character, and neither in quantity nor quality presents those characteristics which are ordinarily observed in nervous affections.

V.

The application of gloves was, with respect to any fraud, a decisive trial. Mgr. Ponceau, Vicar-general of the diocese of Tournai, who, with a tact which cannot be sufficiently praised, has directed the theological inquiry intrusted to him by his venerable Bishop, was the first to propose this test. But the mother of Louise indignantly refused her consent. All those who know her simple and good, but proud and susceptible, character will easily understand this legitimate sensitiveness. 'My daughters are taken for deceivers, are they?' said she; 'they think it is we who make the blood come from Louise? Have I ever asked any one to come and see her? I only ask one thing, and that is that we may be left quietly to ourselves, and that for the future no one shall set foot in our house on a Fri-

day.'² These sharp remarks of the widow certainly deserved to be respected. On the other hand, Louise made no more objection to this test than to any others of those to which it was thought right to subject her; she only begged one thing, that her mother should not be worried.

Considering the importance of this trial, it was thought best to take advantage of a time when the widow Lateau was from home. On Tuesday, 16th December 1868, in the morning, after seeing that the surface of the hands and of the feet was perfectly intact, a tight-fitting kid glove was put on each hand, tied, and sealed round the wrist. These gloves were cut like mittens, so that Louise might be able to work, and that her mother might not notice them. A sock was placed upon one of the feet in the same manner. The next day, Wednesday, Dr. Lecrinier, M. Dupont de Fayt, and the school-master of Bois d'Haine assured themselves that these appliances as well as the seals were perfectly untouched, and that it was impossible, without displacing them, to touch the stigmatic surface of the hands and of the foot. These gentlemen thought it would be well to take the glove off one of the hands: they therefore broke the seal of the left-hand glove and removed it. There was neither blister nor redness. On the Friday morning, after having certified the complete integrity of the three appliances, Dr. Spiltoir of Marchienne, in the presence of eight witnesses, amongst whom were several doctors, took off the two gloves and the sock. What they saw was this: the blood was flowing freely from the stigmata in the palms of both hands, and came out of the gloves at every part. On the stigmata at the back of the hands, which were not yet bleeding, the blisters were completely developed. The two feet were in precisely the same condition; on the left, which had been sealed, as well as on the right, which had been the object of no precaution, the blisters were completely developed. The bleeding did not commence until later.

VI.

In the whole of Christian antiquity not a single instance of stigmatisation, properly so called, is to be found. The first person who is thought to have had the stigmata is St. Francis of Assisi. I have given the rather imaginative relation of this fact by M. Maury; here

² In the *Month* magazine for July 1873 (London, Simpkin, Marshall, and Co.) is a detailed account of the way in which the Lateau family shrink from public notice. The account is by one who has had a share in translating this volume.—TRANSLATOR.

I will give the account of it according to an illustrious contemporary of St. Francis, St. Bonaventure, who has written his life :

'Francis divided his life between work and prayer, passing in turn from the most sublime contemplation to works of mercy towards his neighbour. In order to meditate more at his ease he retired from time to time on Mount Alverno in the Apennines. There he fasted for forty days in honour of the archangel St. Michael, absorbed in prayer and inflamed with love. During this time he was favoured with long and frequent ecstasies, in which, conversing with God, he learnt at the same time His infinite Majesty and his own nothingness. He did the same thing again two years before his death. And as he was examining what he should do in order to follow for the future the will of God, a secret inspiration told him that he had only to open the Gospels and that he would there find what he was seeking. To obey this interior voice he betook himself to prayer; then he bade his companion open three times, in the name of the Holy Trinity, the book of the Gospels placed upon the altar. Each time the book was opened at the place where it speaks of the Passion of our Lord. He recognised by this, that as he had hitherto striven to imitate the life of Jesus Christ, it was now God's will that he should imitate Him in His Passion and sufferings. And although he was worn out already by his penitential life, he resolved without hesitation to obey in this the voice of God.

'One morning then, the day of the Exaltation of the Holy Cross, as he was praying on the slope of the mountain, and felt a vehement desire to be crucified with our Lord, he saw coming down from heaven towards him a seraph, who had six bright flaming wings. When the celestial messenger was near him he perceived between his wings the form of a man crucified, with the hands and feet stretched out. Two of the wings were raised above his head, two others were spread out as if to fly, and two others covered his body. Filled with astonishment at this sight, he experienced, nevertheless, a great joy at the apparition with which God favoured him, and a profound grief at the same time on account of the mournful spectacle of which he was witness, and which pierced his heart like a sword. Neither could he understand how the impassibility of a seraph could be compatible with suffering. But the meaning of this apparition was soon discovered to him, and he saw that it was by the inflaming of his heart rather than by the martyrdom of the flesh that he was to become conformed to our Lord. When the vision had disappeared, it left burning love in his soul and marvellous imprints in his body. He had in his hands and in his feet the marks of the nails, such as he had seen them on the image of the seraph; and on his right side was a wound which seemed to have been made by a lance. These

wounds opened wide at the extremities, and bled. In the middle nails had formed themselves, like nails of iron, in the flesh and the cellular tissue. They were black and hard, with a head on the top, and at the bottom a point which was as it were turned back, so that a finger could be laid between them and the flesh. They could be moved in any direction; for on one side they were pressed against the flesh, and on the other projecting in the opposite direction; but they could not be taken out. St. Clare satisfied herself of this, for she tried after the death of the saint to draw out one of them, and could not succeed. Walking became difficult to him, and it is on this account that he went on horseback in his journeys across the country. The wound in his side was deep and of the breadth of three fingers, as a brother who had touched it by chance testified. Moreover, it was red, and as it were rounded by the contraction of the flesh; his clothes were often stained with the blood which came from it.

‘No appearance of gangrene or of suppuration was ever seen in these wounds; neither did the saint ever employ any remedy to heal them; and it is only by a miracle that he was able to live two years longer, notwithstanding the sufferings and the continual loss of blood that they caused him. When he came down from the mountain with these marks he was greatly embarrassed; for on the one hand he did not wish to reveal the secrets of God, and on the other he well saw that he could not hide them from those who were about him. Uncertain whether he ought to be silent or to speak, he assembled some of his most intimate friends, and exposed to them his doubts, but in general terms. One of these friends, more penetrating than the rest, saw clearly that something extraordinary had happened to him, and told him it was not for himself but for his neighbour. Francis decided therefore not to hide what might be of some use to others, and related what he had seen, adding that he who had appeared had pronounced at the same time some words which he would never reveal to any one on earth during his life. However, he hid his stigmata as much as he could, being careful on that account to wear shoes and to keep his hands well covered; but in spite of all his precautions many of the brothers saw that which he could not quite hide. Pope Alexander and many cardinals bore testimony to this wonder, as ocular witnesses; and after his death his stigmata were seen by more than fifty brothers in the monastery; also by St. Clare and the sisters of her convent, by a considerable number of lay persons, who had hurried from all the neighbourhood to be witnesses of this marvel, and who were able to touch them with their hands.’³

³ *Life of St. Francis*, by St. Bonaventure, ch. xii.-xv., in Goërres, *La Mystique*, &c., translated from the German by Charles Sainte-Foi, vol. ii. p. 203, &c.

Veronica Giuliani, in the seventeenth century, had the stigmata in her side, her hands, and her feet. Water and blood flowed from them. These mysterious wounds opened during an ecstasy on Good Friday, in the year 1697.

Some persons imagine that the ecclesiastical authorities believe too easily in the reality of these extraordinary phenomena. It will not be out of place therefore to relate here the tests which Veronica Giuliani was made to undergo.

'She was obliged,' says the author of her life, 'in obedience to her confessor, to submit to a very severe examination, which was intrusted by the tribunal of the Roman inquisition to Eustachi, the Bishop of her diocese, that it might be proved whether the thing was true, or if it was only an odious deception. The Bishop proceeded in such a manner that the imposture of Veronica, had any existed, must inevitably have been discovered. He endeavoured especially to find out if she was patient, humble, and submissive, because it is by this that the operations of the spirit of God are distinguished. He deprived her of the charge of mistress of novices, and reprimanded her in the parlour in so loud a voice that he was heard as far as in the cloisters of the convent. He treated her as a sorceress, an excommunicated person, and threatened to have her burnt in the middle of the convent. Not satisfied with this, he had her shut up in one of the rooms of the infirmary, and forbade her to write, to go to the parlour, to assist in choir or at mass except on festivals, and even then she was obliged to stand at the door as if excommunicated, accompanied only by a lay sister named Frances, who had orders to treat her harshly, as a hypocrite and a sorceress, and not to allow her to speak to the other sisters. For some time also she was forbidden to receive Holy Communion, and the abbess fixed the time she was to pass in the confessional. At the same time the Bishop charged several physicians to heal her stigmata. After having tied her hands, they enclosed them in gloves, which were then sealed. These trials lasted until the month of October was far advanced, and the wounds, instead of healing, grew still wider. As to the saint, she did not change for a single instant; she remained always humble, resigned, calm, forgetting herself and never complaining of the harsh treatment that she received. At last the inquisition, from the reports of the Bishop, declared itself satisfied, and Veronica was left in peace.'⁴

Jane of Jesus Mary, in the same century, underwent an equally severe examination; after a prolonged ecstasy her hands were found marked with stigmata, on Friday, 20th May 1613. Soon afterwards

⁴ *Life of S. Veronica Giuliani*, by Salvatori, pp. 99-108 and 174.

she had the crown of thorns. 'When the affair was known, credit was not given to it without a severe examination. Ferdinand d'Azevedo, Archbishop of Burgos and president of Castile, having heard of it, ordered his Grand Vicar Manrico to take exact informations and to send him a report on the subject. The latter assembled a Court on the 16th February 1618, composed of the Commissary of the Inquisition, the Suffragan Bishop, several abbots and priors of the country, parish priests, learned men, a soldier, some burgesses of the town, and two physicians—Aspe and Pacheco. Jane appeared before them and showed them her wounds, so that each one could in turn examine them attentively. She first showed her hands; the judges looked at them carefully, and found in each a wound which was neither round nor square, but nearly triangular. It was not very deep either, but sufficiently so for the flesh to be seen, because the cuticle was torn. It was covered in the centre with a whitish humour, as with a dew. The wounds did not penetrate to the other side of the hands, and around them no swelling or inflammation was perceptible, but all was in its natural state. They washed one of these wounds with a sponge and water. Then, at the suggestion of Pacheco, it was washed again with soap, and with such force that Jane experienced violent pain; but nothing betrayed externally what she felt. Aspe declared that he had seen these wounds more than two years and a half before; that he, with Oliva, had undertaken to heal them, but that, notwithstanding all their remedies, they had always remained in the same condition in which they were to be seen at that moment. Jane then had to show her feet, and to place them upon a little bench. On the top of the foot a wound was seen covered with the same dew, but it appeared deeper than that of the hands. On the other side—that is to say, on the sole of the foot—there was another still deeper; but there was no tumour or any inflammation. They obliged her also to uncover her chest as much as modesty allowed, and on the left, under the breast, a wound was seen, much larger than the others, of a different shape, deeper and sending forth more blood. They next inspected her head. When the forehead was uncovered, a circle was seen, about the width of a finger, rising above the rest of the skin, soft and yielding to pressure, and so deep that the physicians considered it penetrated to the skull. They declared that the wounds which they had inspected were not natural, and that they could not possibly be the effect of fraud; and afterwards they expressed this their judgment in writing and affirmed it by oath. All the others, struck by what they had seen, by the admirable virtues of Jane and the miracles that she had worked—miracles of which many amongst them had been witnesses—shared the opinion of the physicians and confirmed their testimony. An offi-

cial report was then drawn up, signed by all the members of the commission, and placed in the church of the Franciscans at Burgos, after the result of the inquiry had been communicated to the Archbishop. But the latter was not yet satisfied. He went himself in the following year to Burgos, made all necessary inquiries, caused Jane to be brought before him, and in presence of trustworthy witnesses, examined her wounds one after another with scrupulous attention. He heard from her that the stigmata had first appeared on the back of her hands, but that she had begged God to make them disappear because they attracted too much attention, and that God had granted her request. After a careful investigation he sanctioned the report of the Commission, and drew up a formal declaration to attest it.⁵

In our own days the most celebrated case of combined ecstasy and stigmata is undoubtedly that of Maria Mörl. 'Let me now,' says Goërres, 'add to the cases of this kind, which have been attested by honourable men worthy of all faith, those of which I myself have been witness; not that I have the pretension to give my testimony as an evidence of their truth, but because it seems to me scarcely reasonable to speak of what has taken place formerly without mentioning the events which are now passing around us.

'Maria Mörl was born on the 16th October 1812. She grew up under the care of a pious and intelligent mother, whom she afterwards assisted with zeal and skill in the management of the household. From the tenderest age she showed many excellent qualities; she was kind and generous towards her little school companions, sharing willingly with them whatever she might have, and rendering them any little services in her power. Without being in any way remarkable, she gave promise of considerable ability; her imagination was by no means over-lively, and moreover she did nothing which could in any way excite or assist it. At that time, and indeed always, she read little, but distinguished herself by great intelligence and quiet tact, by gentle and thoughtful kindness, which showed itself especially towards the poor, and by great fervour in prayer. She was frequently to be seen in the Franciscan Church, not far from her father's house. At the age of nineteen she lost her mother, and her father was left a widower with nine children, the youngest of whom was only ten days old. As he was incapable of managing the household, the task devolved upon Maria, who received it with joy and fulfilled it with zeal and success. She became more serious and led a more interior life, was more assiduous in attending church and performing her exercises of devotion, for

⁵ The Acts of her life, printed at Cologne in 1682, pp. 158-187.

she had much to suffer, and the burden was heavy for her. Her sorrow for her mother's death was so deep and lasting that for three years she continued to weep over her loss. Her regrets diminished, however, later on, when she had renounced everything earthly. Still her cares and anxieties increased daily. Poverty and all its attendant trials weighed upon her more and more, and her strength gradually gave way. At the age of eighteen she had a serious illness, from which she never thoroughly recovered; she continued to suffer during the remainder of her life.

‘These facts are all we know of her exterior life; and her interior life, as may be imagined, is still less known. Spiritual trials of more than one kind were added to the temporal trials she had to bear. And, as is often the case, temptations followed her in proportion as she advanced along the interior paths by which God was leading her. During this time of suffering, the frequenting of the Sacraments was, as before, her only remedy. From 1830 to 1832, she made in this manner rapid but steady progress in the spiritual life, yet without any unusual phenomena being remarked in her. But after 1832, when she had attained her twentieth year, her confessor noticed that she sometimes gave no answer to the questions he asked her, and seemed unconscious of what was passing around her. He questioned those with whom she lived on the subject, and they answered that she was always like that when she had received Holy Communion. This answer struck him. Until then he, like every one else, had taken what passed in her to be the consequence of an ordinary illness, but now, for the first time, he thought that it might proceed from some higher cause. He was strengthened in this idea when, later on, these phenomena increased in her, and took a more decided character. At length, an event which took place in the course of the same year gave him the key to this extraordinary condition.

‘The procession of Corpus Christi took place at Caldarno, as indeed everywhere in the Tyrol, with great pomp. Cannons were fired, and a band went through the streets. All this noise and excitement passed under the windows of Maria's room. Loud music had always had an unpleasant effect upon her; even the sound of a violin or of a wind instrument had sometimes been sufficient to bring on the most violent cramps. Her confessor, busy with the preparations for the festival, wished to have the whole day free, and, at the same time, to spare her the disturbance and excitement which the noise in the streets might cause her. And as he was already aware that after Communion she always remained in an ecstasy for six or eight hours, or even longer, he thought it would be best to give her Holy Communion early, so that she might be quite quiet the rest of the

day. He therefore brought her the Blessed Sacrament at three o'clock in the morning, and she fell into an ecstasy immediately afterwards. He then left her, and was so much occupied that he was unable to visit her again until three o'clock in the afternoon of the following day, when he found her kneeling in the same position in which he had left her thirty-six hours before. Greatly surprised, he questioned the people of the house, and learnt from them that she had remained the whole of this time in ecstasy. In general, they paid little attention to her in the house; they left her to her ecstasies and prayers without taking much notice of them; and when she required anything, she had to call some one and ask for it. Her confessor understood at once how deeply the spirit of ecstasy had penetrated her whole being; that it had in a measure become a second nature to her, and would grow to be her habitual state if he did not restrain it. He recalled her to herself, and endeavoured to keep it within bounds by the virtue of holy obedience, to which she had bound herself by vow upon entering the Third Order of St. Francis.'

We have no details of the manner in which the stigmata first developed themselves in Maria Mörl. 'Already in the autumn of 1833, her confessor, Father Capristan, had noticed by chance that the part of her hands where the wounds afterwards appeared was beginning to sink down slightly, as if under the pressure of some external substance. At the same time these parts became the seat of great pain and frequent cramps. From these facts he conjectured that the stigmata would soon appear, and the event justified his opinion. On the Feast of the Purification, the 2d February 1834, he found her holding a cloth, with which she wiped her hands from time to time, frightened like a child at what she saw. Perceiving blood upon the cloth, he asked her the meaning of it. She answered that she could not understand it herself, but that she must have cut or hurt herself. In reality, however, these were the stigmata, which remained henceforth imprinted upon her hands, soon showing themselves also upon her feet, and being completed by the wound upon the heart. The manner in which Father Capristan treated her is so simple, and manifests so little pretension to the marvellous, that he did not even inquire what had passed within her soul, or what could have caused the appearance of these stigmata. In shape they were nearly round, rather inclining to oblong; not quite half an inch in diameter, and imprinted on the two hands and on the two feet. On the Thursday evening and the Friday morning, drops of clear blood frequently flowed from these wounds.⁶ On other days they were covered with a scar

⁶ See an account of this ecstasica and of two others in the Tyrol, written by the Earl of Shrewsbury. London, Dolman, 1834.—TRANSLATOR.

of dried blood, but neither inflammation, ulceration, nor the slightest vestige of lymph was visible. She did all she could to hide them, as indeed she hid everything that might betray the graces she received. But in 1833, on the occasion of a solemn procession, the ecstasy of jubilation developed itself in her. One day it surprised her in the presence of several witnesses, who beheld her bright and beautiful as an angel, her arms extended in the form of a cross, and her feet scarcely touching the bed. All who were present could see the stigmata upon her hands, and the matter could no longer remain a secret.

‘She had always been delicate. In the autumn of 1834 she was attacked with very painful convulsions, which lasted several weeks. However, after Christmas, or rather after the Feast of the Immaculate Conception, she recovered her fresh healthy appearance, and retained it until the end of the following year. It was in the autumn of the same year that, travelling through the south of the Tyrol, I saw her several times. Caldarno, the place of her birth, is situated in a charming country. On the right bank of the Etsch, near its junction with the Eisac, rises a high mountain, which extends over a space of two or three leagues, and mingles its spurs with those of a still more elevated chain, which separates the valley of the Etsch from that of Nunsberg. Between these two mountains, and four or five hundred feet above the level of the Etsch, is a valley, in the midst of which lies a small lake, reflecting in its clear and limpid waters the surrounding vineyards. Here, on a gentle slope, rises Caldarno, with its ancient stone houses; around it a fresh verdant landscape, dotted over with villages, castles, and Calvaries. In the distance the snowy summits of the Alps are seen in all their magnificence on one side, and on the other, between the bare or woody peaks of the mountain-chain, views down the valley of the Etsch as far as Trent. It is in one of these solid stone houses, such as were built in the fifteenth and sixteenth centuries, that Maria Mörl lives. The room in which she sleeps is scrupulously neat; her mattress is very hard, but the bedclothes are always delicately clean. At the bedside is a small domestic altar, and behind it hang a few pictures, to which she has a special devotion; they are fastened to the posts of the windows, which, according to the custom of the country, are furnished with Venetian blinds to soften the very vivid light, and to cool the air, which is so hot in that climate. Maria Mörl is of the middle height, of a slight figure, as is generally the case with the German race in the Tyrol, mixed as they have been with so many different nations, but amongst whom the Franco-Rhenish blood appears to predominate. This may probably be attributed to numbers of German colonists having been sent from the banks of the Rhine by

the emperors to guard this important entrance to the plains of Italy. As her only food, she takes from time to time, either in obedience to her confessor or when she feels that she requires it, a few grapes or some other fruit, or a little bread. In consequence of this meagre diet she has become very thin, yet not more so than many others who lead an ordinary life. Her face has still a certain fulness, which varies, however, very much according to the state of her health.

‘On my first visit I found her in the position in which she passes the greater part of the day, kneeling on the edge of her bed, and in an ecstasy. Her hands, crossed upon her breast, allowed the stigmata to be distinctly seen; her face, slightly raised, was turned towards the church; her eyes, lifted up towards heaven, expressed profound absorption, that nothing from without could disturb. No movement could be perceived except that produced by respiration or deglutition. Occasionally a kind of slight oscillation was perceptible. It was a spectacle which can only be compared to that which the angels would present could we behold them prostrate in prayer before the throne of God. It is no wonder that it produces so vivid an impression upon all who witness it. The hardest hearts cannot resist this sight, and astonishment, joy, and piety have caused many a tear to be shed around her. It is said by the priest of her parish, and by others who have acted as her directors, that during the last four years she has spent all the time of her ecstasies in contemplating the life and Passion of our Lord, and in honouring the Blessed Sacrament. Her prayers are regulated according to the order of the ecclesiastical year; she has written some of these prayers for her confessor, who pronounces them to be full of fervour and edification.

‘The faculty which she possesses of seeing distant objects, whether in space or time, is only exercised in what regards the Church and religion; far different from clairvoyants, she is as completely ignorant as other people of what takes place in her own person. In the events which she has foretold there was nothing which could have led her to expect them at the time when she predicted them, and their fulfilment has always depended solely upon the free exercise of the human will, and upon Divine Providence. She has never spoken of her visions to any one but her confessor, and as the circle of her knowledge is very limited she has often great difficulty in finding words to express what she has seen. Nevertheless, the scene which is pictured in her mind is clearly manifested by the bearing and posture of her body, which always partakes, to a greater or less degree, in the object of her visions. Thus, at Christmas, she is seen holding in her arms with unspeakable joy the new-born Infant; at the Epiphany she is kneeling in adoration behind the Magi. She assists at the marriage-feast of Cana, reclining on one side at table,

after the manner of the Jews—a circumstance which she could not have learnt by any exterior means, since the pictures in our churches never represent this ancient custom. In the same way her whole figure expresses the subject of her meditation on other festivals also.

‘But the most frequent object of her contemplation is the Passion of our Lord, and it is this also which produces upon her the deepest impression, and at the same time the most vivid outward expression. During Holy Week especially, her whole being seems penetrated with the impression of our Lord’s sufferings, and the outward representation of them becomes more perfect. The contemplation of this mystery is renewed every Friday in the year, and thus affords a frequent opportunity of observing its marvellous effects. Here again her distinguishing characteristic is shown in the simple and natural manner in which the representation of this great mystery takes place; for it can be followed through every stage, from its beginning to its final development, and each scene of the terrible drama bears the impress of her own personality. It is clear that her mind has long since acquired the power, not simply of contemplating from afar, or of apprehending superficially the object of her meditations, as is the case in ordinary men, but of placing herself close to it and penetrating into its very substance, thus bringing herself into the most intimate connection with it. Her mind so gives itself up to the object which occupies it, that the most perfect union follows, amounting almost to identity. Then the mind moulds the object at will, and forms it to its own image. As this process of assimilation is developed, the reflection of the interior action appears outwardly in the body, and her contemplation thereby receiving an exterior form, itself becomes an object of contemplation to the observer.

‘The action begins early on the Friday morning, and if we follow its development we see that as many persons think while they speak, or rather speak while they think, without being conscious of the words they utter, so our ecstasica meditates on the Passion while reproducing it, or rather reproduces it while contemplating it, without being conscious of what she is doing. At first its movement is calm and regular; then, as it gradually becomes more sad and terrible, her features by degrees take the impress of deeper and more intense sorrow. At last, when the hour of our Saviour’s death arrives, and anguish has penetrated into the very depth of her soul, the image of death is reflected in every feature of her countenance. There she is, kneeling on her bed, her hands crossed upon her breast. Around her reigns a profound silence, scarcely broken by the breathing of those standing by. It seems as if the sun of her life was setting, and as his light grows dim, the shadows of death, rising from their abyss, gradually surround her, enveloping her limbs one by one in

their gloomy pall, and crowding in upon her soul, which sinks down powerless the instant that his last ray has vanished. She was pale during the whole of the action, but towards the end she grows still paler. The shudder of death passes over her whole frame, and her life sinks under still deepening shadows. Her sighs, which escape with difficulty from her breast, show that the oppression is still increasing. From her fixed eyes large tears roll slowly down her cheeks; her lips are parted wider and wider by almost imperceptible movements; like the flashes of lightning which precede the storm, they form at first smaller circles, then they agitate all the face, and become at length so violent as to shake from time to time the whole body. The sighs are now changed into moans, which are heartrending; a deep flush covers the cheeks; the swollen tongue seems to cleave to the parched palate. The convulsions increase in violence and intensity. The hands, which were gradually sinking, fall heavily. The nails grow blue, and the fingers are clenched convulsively. The death-rattle is heard in her throat. Her breathing, more and more hurried, escapes with incredible efforts from her chest, which appears as though oppressed with circles of iron. The features are no longer to be recognised. The mouth is opened to its full extent, the nose pinched in, and the eyes deeply sunk in the head. A few more sighs at long intervals escape from that form stiffening in death. The last is breathed forth. Then the face relaxes, and the head, bearing already every mark of death, sinks down in complete exhaustion. She remains in this position for about two minutes. Then the head rises, the hands are again crossed upon her breast, and her face regains its natural calm expression. She is kneeling peacefully, her eyes raised to heaven and presenting to God the homage of her gratitude. The same scene is renewed each week, always the same in its principal features, but offering each time different particulars, which are, as it were, the expression of her interior dispositions; of this I have convinced myself several times by attentive observation. There is nothing artificial in the whole of this action; it flows naturally from the depths of this woman's nature, as the spring flows from the rock. Nothing false, forced, or exaggerated can be discovered in this representation, and were she really dying, death would come in the same manner.

‘However much absorbed she may be in these contemplations, a single word from her confessor, or from any other person who has spiritual authority over her, suffices to recall her immediately to herself, without any transition being perceptible. She only takes the time necessary to recollect herself and open her eyes, and in an instant she appears as though she had never been in an ecstasy. Her expression is quite different; she looks like an artless child with all

its simplicity and candour. The first thing she does on awakening, if she sees any one present, is to cover her wounded hands, like a child who, having inked his wrist-bands, hides his hands when his mother enters the room. Being now accustomed to the presence of strangers, she looks round with a sort of curiosity, giving each one a friendly greeting. She is evidently ill at ease when the impression of these thrilling scenes is still too visible on the face of those who have witnessed them, or when she is treated with any kind of veneration and reverence; and she endeavours with unpretending cheerfulness to efface these deep feelings. Not having been able to speak for a long time, she tries to make herself understood by signs; and when this does not suffice she looks at her confessor, as if asking him to help her to express herself, like a child that has not yet learned to pronounce its first word.

‘ Her brown eyes beam with the gaiety and candour of childhood; her glance is so clear that it allows the very depth of her soul to be searched; and one is quickly convinced that in her whole being not a single dark corner exists in which the slightest fraud could be concealed. Not the slightest trace of exaggeration, of affectation, of sentimentality, of hypocrisy or of pride, can be discovered in her. There is nothing but the charm of youth, the serenity and candour of which have been preserved in simplicity and innocence. She is not merely cheerful, but even playful, possessing a sure and delicate tact, which enables her to avoid everything that could appear unbecoming. When she is surrounded by her friends, she is able, once recalled to herself, to remain in this condition for a long time; but one feels that to do this a great effort of the will is necessary; for ecstasy has become her natural state, and the ordinary state of the rest of mankind is for her something artificial and unnatural. In the midst of a conversation, when she seems to take the most lively interest in it, all at once her eyes grow heavy, and in an instant, without any transition, she is in an ecstasy. Whilst I was at Caldarno, she had been asked to act as godmother to a newly-born child. She had taken it in her arms with the greatest joy, and manifested a lively interest in the whole ceremony; but while it lasted she fell several times into an ecstasy, from which it was necessary each time to recall her.

‘ The sight of these ecstasies is a wonderful spectacle. Lying on her back, she seems to float on waves of light, and looks around with a joyous smile; then all at once she is gradually plunged, as if into an abyss. The waves still play for an instant about her, then their waters cover her face, and one could fancy her surrounded by a transparent light. Then also the childlike look has disappeared. Often her brown eyes shine forth from her almost

glorified face. Open to their widest extent, without resting on any particular object, they seem to dart forth their rays into space. At such times she might be compared to a Sibyl, but great, noble, and awe-inspiring. It must not be imagined that she neglects her household duties to devote herself to her meditations and exercises of piety. From her bed she directs and superintends everything, in which task she was formerly aided by a sister who is now dead. During the last few years a pension has been procured for her by some kind friends; as she needs nothing for herself, she devotes it to the education of her brothers and sisters, whom she has placed in various institutions according to their dispositions. Every day, at about two o'clock, she attends to business matters. Her confessor recalls her to herself; she consults him about any difficulties she may have, and gives her directions, thinking of everything, interesting herself in everything that concerns the welfare of those dear to her with such practical good sense, that everything is always arranged in perfect order.'

VII.

The sweat of blood or hæmatidrosis described by Aristotle, and subsequently mentioned from time to time by some few observers, is, however, a rare malady, and few medical men ever have the opportunity of observing it. I will quote some observations relating to it.

Case 1. Georges Durner relates that a student, having been imprisoned for some nocturnal offence, was so much affected by grief, that his chest, arms, and hands were covered with a sweat of blood, which continued until he had regained his liberty.

Case 2. Boerhaave has preserved the following case: 'A girl of about eleven years of age experienced a tensive pain in her right arm, which became covered with pustules. In these she felt a pricking pain. Soon afterwards, clear blood came from these pustules, which then disappeared without leaving any marks. A month after, when this girl reached her twelfth year, the same occurrences were renewed, and were soon followed by the first appearance of menstruation. The following month the same phenomena returned in the same order. Recourse was had to *emmenagogues* and to bleeding from the feet. The periods returned regularly, and were no longer preceded by hæmorrhage from the arm.

'The winter was severe, and each time that the fingers of the girl's right hand grew cold, blood flowed abundantly from their extremities, without the slightest vestige of any eruption or crack in the skin being visible. The hæmorrhage ceased when the fingers were

warmed, and entirely disappeared as soon as the mild spring weather came. During four months nothing unusual occurred, and menstruation continued regularly; but afterwards it was suppressed, when every day, or every second day, sometimes every eighth day, a hæmorrhage came on, drop by drop, through the skin of the fingers of the right hand. After wiping away the blood, it was impossible to distinguish the orifices from which it had proceeded. Later on, when blood had flowed from the fingers during the morning, the girl was seized in the afternoon with giddiness, and her face was much flushed. The region of the larynx swelled, and a hysterical suffocation came on. Soon afterwards blood flowed from several places at the back of the neck, and almost immediately the giddiness, the flushing, the swelling of the larynx, and the feeling of suffocation disappeared. Another time, the right hypochondriac region swelled and the girl suffered great pain, which was relieved by a plaster. All these symptoms diminished after bleeding from the feet, and the administration of *emmenagogues* with anti-hysterical baths; but menstruation remained suppressed, and fresh morbid symptoms appeared; the face flushed suddenly; copious bleeding of the nose occurred, and had not ceased when the region of the larynx began to swell. A sweat of blood came out on the back of the neck, which returned to its natural size; but the same day the sweat of blood showed itself on the right arm and on the calf of the right leg. In the evening, spasms attacked the entire right side of her body; her intellectual faculties remained, however, unaffected. The symptoms, which continued in all their intensity until ten at night, were succeeded by paralysis, with loss of power of the right arm, and contraction of the leg on the same side. The left eye was affected by amaurosis; this was the only affected part of the left side. The epigastrium remained swollen. A month later, the left eye swelled suddenly, and tears of blood flowed from it; the amaurosis continued nevertheless. The skin of the nose was then the seat of a sweat of blood, which was succeeded by an epistaxis, and then by spitting blood; next, blood streamed from the finger nails on the right hand, and from the inside of the right arm. A swelling came on at the same time in the right arm, but disappeared without any sweat of blood. Two days afterwards the sick girl had a sudden fright, which was followed by a slight hæmorrhage from the left eye, and from the skin of the right hand and arm.⁷

Case 3. A woman, forty-five years of age, and of a strong constitution, had frequent exterior hæmorrhages, which caused great nervous irritability. In 1851, a sweat of blood appeared on her forehead,

⁷ Case found by Van Swieten amongst Boerhaave's papers.

on both her hands, and on her back. This phenomenon was repeated three times between then and the year 1856, always after violent nervous attacks. Dr. A. B. Franque, of Munich attended her from 1857. During six years he observed no cutaneous hæmorrhage, notwithstanding nervous attacks. In 1863, he was at last witness of a sweat of blood. For four days the woman complained of shooting pains along the spine, under the left ear, in her forehead, and in her left arm. Soon after violent convulsions came on, followed by loss of consciousness. At the end of an hour a profuse perspiration came out upon each part in which she had felt these pains; the perspiration was of a reddish colour, and red globules of blood were visible in it when examined under the microscope.⁸

Case 4. We now come to a still more extraordinary case, in which we observe at the same time spontaneous hæmorrhage and nervous phenomena. I am glad to have met with it, because it shows that the pathological cases which have most features of resemblance with the phenomena at Bois d'Haine are nevertheless clearly distinct from them. 'A young girl, twenty-one years old, small-made, of a sanguine temperament, of irregular menstruation, with a brain only partly developed, weak-minded, idle, and obstinate, but inclined to a contemplative life, was annoyed by her parents for having abjured Protestantism. She ran away from home, sought shelter at several different houses, and was at last placed in the hospital. She then had attacks of hysteria, which manifested themselves by convulsions of the whole system, by exquisite sensibility of the pubic and hypogastric regions, and by feelings of suffocation, with the hiccough and sobbing which are peculiar to that state. When the attack of hysteria was violent, and lasted for twenty-four or thirty-six hours, the sick girl went into a kind of ecstasy, in which her eyes remained fixed, without any appearance of intelligence, and she was either motionless or her movements simply automatic. She sometimes murmured prayers, and a sweat of blood showed itself upon the upper part of the cheeks and on the epigastrium. The blood escaped in small drops and stained her linen. The whole cutaneous capillary system was injected in the part which was the seat of this hæmorrhage; the skin there was of a bright-pink colour, and covered with a network of vessels. This phenomenon, which I often witnessed, returned each time that the hysterical catalepsy lasted long, or was heightened by the impatience of the sick girl, who, although pious in her way, was very passionate, and by her sour disposition contradicted the idea of holiness which this sweat of blood gave of her to pious but unenlightened persons.

⁸ *Wurtsbürger Medicinische Zeitschrift*, vol. iv. 1863.

‘ These symptoms continued nearly three months. They were at first treated without success by local bleedings. They yielded quickly enough to repeated revulsive bleedings, and to other applications of a revulsive character⁹ (i.e. applied at a distance from the part affected, with the object of drawing blood away from it).

It is clear, notwithstanding the union of hæmorrhagic and nervous affections in the same person, that the case observed by Chauffard has only a slight resemblance to the one which we have watched at Bois d’Haine. Indeed, if we analyse briefly the case of the physician of Avignon, it is evident at once that it belongs properly to the class of diseases. On the one hand, there is in this young girl a case of hysteria distinctly characterised by *general convulsions, exquisite sensibility of the pubic and hypogastric regions, feelings of suffocation, hiccoughs and sobbing*. This disease sometimes takes the form of ecstasy, as may be observed in other cases of hysteria.¹⁰ *The girl’s eyes are fixed without any appearance of intelligence; she is either motionless or her movements are merely automatic*. On the other hand, there exists no less evidently a decided hæmorrhagic disease, viz. hæmatidrosis or sweat of blood; *blood escapes in small drops from the upper part of the cheeks and from the epigastrium, without any apparent injury in the skin*. The course of these two phenomena is capricious and irregular; blood flowed from the sweat glands only *when the attack of hysteria was violent, and lasted twenty-four or thirty-six hours*.

Is it necessary after that to repeat once more that Louise Lateau presents none of the characteristics of hysteria; that in her case the hæmorrhage is absolutely distinct from the sweat of blood;¹¹ that the bleeding always precedes the ecstasy; that it shows itself in particular places; that the two phenomena return with perfect regularity on Friday, and on Friday only?

VIII.

Hæmophilia¹² being a rare disease in our country, it will be useful to insert here an observation of Blagden, in which we perceive most distinctly the essential characteristics of the disease. By comparing this observation with the stigmatic hæmorrhages of Louise Lateau,

⁹ Chauffard d’Avignon, cité par M. Parrot dans son *Etude sur la Sueur de Sang et les Hémorragies névropathiques*, Paris, 1859, p. 13.

¹⁰ See p. 142, on ecstasy.

¹¹ See, on cutaneous hæmorrhage, p. 58.

¹² Concerning hæmophilia, a recent special treatise on the subject, by Dr. Wickham Legge, may be consulted.—TRANSLATOR.

the reader will see at once the radical differences which separate these cases.

The patient had suffered in his childhood from an alveolar¹³ hæmorrhage, which was caused by the extraction of a tooth, and lasted twenty-one days. If he cut himself accidentally, blood flowed in very unusual proportion, and was with difficulty arrested. In his twenty-sixth year he received a trifling wound in the forehead, which brought on an enormous flow of blood from a small artery that was injured. It was arrested for a time by tying the two ends of the blood-vessel, the walls of which were as thin as those of the veins. The hæmorrhage, however, returned, and could only be arrested by the use of caustic potash. The following year the patient had another tooth extracted. A profuse alveolar hæmorrhage took place, and was only temporarily suspended by the application of caustics, a hot iron, cold, or plugging. On the sixth day the patient had reached the last degree of exhaustion. B. Brodie tied the common carotid artery, without being able to arrest the hæmorrhage. The wound of the operation, which had bled but little at first, soon began to pour forth a large quantity of blood, although no open vessel could be discovered; blood flowed from the wound as if from a sponge. The application of ice only stopped the hæmorrhage for a few minutes. On the seventh day it became more violent than ever, and caused the death of the patient. The carotid presented some fatty deposit in the lining membrane. The coats of the temporal artery, and some other branches of the external carotid, were so thin as to be almost transparent.¹⁴

IX.

The following experiment was made by M. Bouchard in order to discover the degree of tension which the capillary vessels can resist before bursting:

Upon the front part of the forearm of a healthy adult a cupping-glass, *à pompe*, was applied. To this cupping-glass was attached a tube in the form of the letter U, the closed limb of which was filled with mercury. In one or two minutes several ecchymotic spots were observed upon the skin covered by the cupping-glass; a few seconds later these became numerous (more than 100 were counted). On account of the oscillation of the mercurial column at each drawing-up of the piston, it was difficult to fix with perfect precision the height of the column at the instant when the first hæmorrhagic points oc-

¹³ *Alveolus*, the gum.

¹⁴ Quoted by Weber, loc. cit. p. 132.

curred. However, it may be affirmed that the column of mercury, allowing for the excess of elevation due to the acquired speed, reached almost the same height in each tube. The column of the closed tube was scarcely a centimètre higher than the other. The atmospheric pressure outside was 29·92 inches. We may therefore say, approximately, that the vascular ruptures were produced under the cupping-glass, when the atmospheric local pressure was not greater than that of a centimètre of mercury ($\frac{1}{394}$ of an inch).

This physiologist remarks, very justly, that in certain morbid states we find hæmorrhages take place in the small vessels under a much lower tension. He believes that in these cases the bleeding comes from the small veins, because they may undergo distension; and a vaso-motor paralysis may give rise to such distension. The vessel being thus relaxed, its surface is made larger by the force of the blood current, and consequently the power of resistance is diminished.

X.

Hypertrophy of the heart, which consists in increased growth of the muscular fibres which constitute that organ, is a frequent cause of hæmorrhage. The blood is impelled more forcibly into the vessels of the general or of the pulmonary circulation, according as the hypertrophy occurs in the left ventricle (which is more commonly the case) or in the right ventricle. The tension of the blood is increased; it accumulates in those organs the vessels of which are most easily distended, and especially in the brain and the lungs, whence hæmorrhages may result. We have already said that hæmorrhages caused *simply* by increase in the blood tension are rare. If they take place sometimes in the case of which we are speaking, that depends partly upon the thinness of the walls of the cerebral and pulmonary vessels, which, being more delicate and less supported than those in the other organs, are more liable to break when unduly distended, and partly also upon the fact, proved by observation, that in the case of hypertrophy of the heart the lining membrane of the arteries frequently become atheromatous,¹⁵ and consequently fragile.

Hæmorrhages caused by hypertrophy of the heart never take place either within or on the surface of the skin, the vessels of which have too much power of resistance, and are too well supported, to give way under the impulse of the heart, even when exaggerated.

By the side of hypertrophy of the ventricles, which impel the

¹⁵ From *ἀθήρα* (gruel), applied to a degenerate state of the vessel wall when it becomes of soft pulaceous consistence in parts.—TRANSLATOR.

blood more forcibly into the vessels, we must place, as a *possible* cause of hæmorrhage, an inelastic rigid condition of the large arterial trunks; in consequence of which they fail to lessen the shock from the heart, and bring the blood to the different organs by jerks.

I will not stop now to speak of injuries to the orifices and valves of the heart. Undoubtedly these injuries can, in certain rare cases, induce an excess of blood tension, and thus cause the rupture of vessels, especially in the brain, the lungs, nostrils, &c.; but, on the one hand, these vascular ruptures and the ensuing hæmorrhages never take place on the skin; and, on the other hand, when lesions of the valves or orifices of the heart are sufficiently advanced to induce hæmorrhages, these lesions are manifested by many other symptoms of so decided a character that it is impossible to mistake them.

In diseases of the orifices or valves of the heart, the hæmorrhage depends for its ultimate cause upon some obstacle to the free circulation of the blood. This cause of hæmorrhage is met with in numberless pathological cases. It may be laid down as a general rule that whenever any portion, large or small, of the venous system is temporarily compressed or actually obliterated, there must be a reflux of the blood into the healthy vessels, and consequently an increased strain upon these vessels.

The usual result of this greater strain is the transudation of serum, or, as we have previously called it, 'white hæmorrhage.' But it is evident that this over-tension may at length cause the rupture of small veins, especially of any which are in an unhealthy state, or which, in their normal condition, are particularly weak and ill-supported, such as the capillaries of the brain, the nostrils, the lungs, or the uterus. Hæmorrhages caused in this manner are met with in several diseases.

We will first consider the diseases of the veins themselves. It has been proved by experiment that the ligature of an important vein can cause the rupture of the small veins, into which the blood flows back and accumulates. Thus Robinson, and afterwards Frerichs, in their experiments upon animals, having taken out a kidney and tied the aorta so as to compel the blood to flow in exaggerated quantity into the remaining kidney, saw ecchymoses occur in the substance of the organ and the urine become bloody.

Now certain diseases of the veins may produce the same result as a ligature, namely, closure of their channel, and may thus bring on hæmorrhages: such are the various degenerations of the arterial coats, phlebitis, thrombosis, embolism; also tumours formed close to the venous trunks may compress them, and thus arrest the circulation. Gendrin relates a case of hæmorrhage from the stomach,

consequent upon the compression of the abdominal aorta by a tumour.¹⁶

Certain diseases of the lungs, liver, spleen, and kidneys may cause the shrinking-up or obliteration of the vessels of these organs, and consequently hæmorrhages. This is frequently observed in tubercle of the lungs, and in certain cases of emphysema.

In some diseases of the liver, and especially in cirrhosis, the compression or obliteration of the branches of the portal vein necessarily causes blood stasis in the organs, from which the blood is carried to the liver by this vessel, that is to say, in the stomach, the intestine, the spleen, and the peritoneum. From this same cause hæmorrhages arise in some diseases of the spleen and kidneys.

Finally, the same cause, *i.e.* occlusion of a part of the vascular system, may intervene, even in the physiological (healthy) state, to produce effusions of blood. Medical men know that the theory which is at present the most generally accepted to explain the production of the periodic hæmorrhage of woman admits that the blood driven out by pressure from the erectile tissue of the utero-ovarian system causes the rupture of the small veins and capillaries of the uterine mucous membrane. This rupture is further favoured by certain anatomical conditions. Thus these vessels, according to Virchow, are more delicate than other capillaries in the body; also they are but slightly supported, being only covered by a thin layer of epithelium, which itself would be carried away at the time—according to this eminent physiologist—by a true catarrhal inflammation.

I have thought well to point out in this place the anatomical and physiological conditions of the menstrual hæmorrhage, in order to show how different they are from those of the stigmatic hæmorrhage.

The different kinds of hæmorrhage at which we have now glanced are so utterly different from the stigmatic hæmorrhage in their origin, that it would be wasting time to consider them in detail. We will confine our remarks therefore to the fact that, firstly, the diseases from which these hæmorrhages might arise have distinctive marks, impossible to be mistaken, and not the slightest symptom of any of these diseases can be traced in Louise Lateau; that the decidedly rare cases of hæmorrhage produced by these causes only take place in the small veins placed within their influence—for instance, in the brain, chest, abdominal cavity, &c.; finally—and this observation is conclusive—that hæmorrhages arising from causes of this kind *never* appear on the surface of the skin. ‘I possess,’ says Monneret, ‘notes of fifteen cases of obliteration of the femoral vein (the

¹⁶ *Traité phil. de Méd. pratique*, t. i. art. ‘Gastro-hémorragie.’

principal vein of the lower extremity), and in none was there any hæmorrhage.¹⁷

In the annals of science I have only met with one case in which extravasation of blood has taken place in the thickness of the skin. 'M. Lepine has communicated to me,' says M. Bouchard, 'the account of a case in which thrombosis (*thrombus*, a clot) of the axillary and shoulder veins, as ascertained at the necropsy, caused ecchymotic stains on the upper and forearm.'¹⁸ In other words, the *obliteration* of the veins of the limb only resulted in causing a few drops of blood to exude, not on the surface of the skin, but into its thickness.

XI.

Claude Bernard has demonstrated that the chorda tympani, a branch of the facial nerve which ramifies in the submaxillary gland, is the controlling or paralysing nerve of this gland, as the pneumogastric is of the heart.

This eminent physiologist has confirmed the experiment of M. Rosenthal, to the effect that stimulation of the superior laryngeal nerve stops respiration, and that consequently this nerve also acts as a paralyser (*nerf d'arrêt*).¹⁹

XII.

The following instances of hæmorrhages produced by moral causes are selected from the most remarkable cases that I have found in different medical works :

Case 1. Florentinus Lendanus relates that in a city which had been taken by storm, a nun, having fallen into the power of a troop of lawless soldiers, was so greatly terrified that she died in their presence from a sweat of blood.

Case 2. I have quoted, in the words of Durrius, the story of a student who, being imprisoned for some night offence, was so overwhelmed with grief that a sweat of blood came out on many parts of his body.

Case 3. Schenkus relates the history of a nun who, passing by chance through a place where two men were engaged in mortal combat, was so overcome by violent emotion that blood flowed from all

¹⁷ Monneret, *Traité de Pathologie générale*, t. ii. p. 374.

¹⁸ Bouchard, *Œuv. cit.* p. 71.

¹⁹ Cl. Bernard, *Leçons sur les Propriétés des Tissus vivants*, Paris, 1866, p. 390 et seq.

the pores of her skin, and she fell down unconscious at the feet of the combatants.²⁰

Case 4. Dr. Parrot records the case of a lady of nervous temperament who, one day, under the influence of violent grief, shed tears tinged with blood. From that time forth a sweat of blood frequently appeared on different parts of her body. It came at variable intervals. Sometimes her face was suddenly covered with blood. These hæmorrhages were never an isolated phenomenon; they came on almost always in consequence of a moral emotion, and complicated a nervous attack with entire loss of movement and sensation.²¹

Case 5. Michel Albert saw an excitable and sensitive woman who vomited blood after a fit of passion.²²

Case 6. Dalmas gives the case of a young girl who received a fright during the monthly period. An hour later she vomited a quantity of blood. Taken to the hospital in Paris, the hæmorrhage returned with the slightest moral emotion, such as a reproach or a slight delay in any correspondence with her friends in the town.²³

Case 7. Latour tells us of a young person who was affected by an alarming hæmoptysis after a fit of passion during her monthly period.²⁴

Case 8. The same author attended a poor girl who, hearing suddenly and unexpectedly some unpleasant news during her period, fell down unconscious and bled profusely from the nostrils.²⁵

Case 9. Van der Wiel says he knew a young girl from whose eyes blood flowed like tears when she grew angry. The blood came from the pores.²⁶

Case 10. Lordat relates that a woman of loose life and of an irascible temper was seized by the police officers and taken to prison. She threw herself into a fearful state of passion, which was followed by hæmorrhage from the nose and mouth, and by an eruption of purple spots which covered her whole body: some of the largest of these spots were an inch in diameter.²⁷

It is evident from the cases here quoted that hæmorrhages may be produced by the simple fact of a moral emotion. But it is important to notice that in these circumstances the bleeding invariably

²⁰ Schenkinius, *Synopsis institut. Med. Disput.*, 1871.

²¹ Jules Parrot, *Etude sur la Sueur de Sang et les Hémorragies névropathiques*, Paris, 1859, p. 2.

²² Rupitz, *De Vomitu Cruento*, quoted by Latour, vol. ii. p. 209.

²³ *Dict. de Méd.*, en 30 vols. t. xii. p. 328.

²⁴ Latour, *Œuv. cit.* vol. ii. p. 312.

²⁵ Same work, vol. ii. p. 30.

²⁶ *Observ. Rariorism. Cent.*, p. 85, 1687.

²⁷ Lordat, *Œuv. cit.*

obeys a law of which we have already spoken ; namely, that when in the human economy a disturbance takes place sufficient to cause a spontaneous hæmorrhage, the blood always escapes by the vessels of which the coats are thinnest and least supported.

The cases which I have just cited fully confirm this law. They may be divided into two distinct groups. The first four are cutaneous hæmorrhages or sweats of blood. We have already had occasion to remark that the sudoriferous glands are rich in capillaries ; that these small vessels have extremely thin coats ; that adhering to the internal surface of the tube which constitutes the gland, they are but little or not at all supported ; that the clear and transparent liquid filling this tube offers no resistance to the issue of the blood.

The remaining six hæmorrhages took place from the mucous membranes. We have seen that the capillaries of these membranes are easily ruptured, and have pointed out the causes of this. I have quoted examples of hæmorrhage from the principal mucous membranes in consequence of moral causes. It would be easy to multiply these cases ; but I have not met with a single instance of hæmorrhage proceeding from the surface of the derma, like the stigmatic hæmorrhages of Louise Lateau.

XIII.

Case 1. Lambecius relates that he saw a young girl in whom, during several years, fits returned periodically on Friday and Saturday.²⁸

Case 2. Dionis relates the history of a young woman who became subject to fits of catalepsy in consequence of menstruation being suppressed from taking cold. The attack returned daily towards night, and lasted several hours.²⁹

Case 3. F. Nasse recounts the following case: a young girl was subject to attacks of catalepsy, which returned at variable intervals. She was placed under the influence of animal magnetism. From that day forward she was able to announce the time of her attacks, which recurred with regularity on certain days.³⁰

Case 4. Sauvages relates that a woman, twenty-four years of age, having been insulted by a peasant, from that moment suffered from attacks of catalepsy, which returned regularly each day, and lasted from half an hour to an hour. She suddenly lost all sense of seeing, hearing, and feeling. Her limbs remained fixed in any position in

²⁸ *Comment. Bibliotec. Cæsar*, vol. ii. p. 688.

²⁹ *Dissertation sur la mort subite*.

³⁰ *Hufeland's Journ.*, b. 38, st. 1.

which they were placed, and by her murmurs, words, and even by her gestures, she expressed the idea that occupied her mind, and which appeared to be always that of her enemy.³¹

Case 5. De Lagarde relates a case of catalepsy in which the fits recurred with great regularity four times a day.³²

Two other interesting cases of periodical catalepsy may be read in the *Revue médicale française et étrangère*, t. iii. p. 152, and in the *Bibliothèque médicale nationale et étrangère*, t. v. p. 33.

I will not stop longer on the question of periodical catalepsy. Whenever this disease takes an intermittent type, whether more or less regular, it still preserves the clearly distinctive features which distinguish it from the ecstasy of Louise Lateau.

XIV.

The following cases of natural somnambulism have been selected from amongst those which in some points resemble ecstasy :

Case 1. Lorry relates that a woman, in a state resembling somnambulism, was in the habit of conversing aloud with absent persons whom she thought she saw. She was so insensible to external impressions that if pinched or pricked she did not manifest the slightest pain. In this condition she perceived distinctly the objects with which her mind was occupied. Her arms and fingers remained in any position in which they might chance to be, until some involuntary movement of the limbs gave them a fresh direction. When the paroxysm was over she had no recollection of what had taken place.³³

Case 2. The same author gives the following case: a woman, during fits of somnambulism, was in the habit of speaking to some person whom she evidently beheld; her conversation always turned upon the thought which preoccupied her. In this state she was no longer aware of the presence of those around her; she neither saw nor heard them. The mother of this woman died suddenly, and the daughter, in her paroxysms, continued to speak to her as if still living.³⁴

Abercrombie relates a series of interesting cases. We will take two of them only.

³¹ *Nosologie méthodique—Catalepsie.*

³² *Revue médic. franç. et étrang.*, t. iii. p. 152.

³³ Lorry, *De Melancholia et Morbis Melancholicis*, vol. i. p. 73 and fol. Lutetiæ Parisiorum, MDCCCLXV.

³⁴ Lorry, loc. cit.

Case 3. 'A few years ago,' says that author, 'I attended a young married lady subject to attacks of somnambulism, which took place constantly in the daytime, and lasted for a space of time which varied from ten minutes to an hour. Without any premonitory symptoms, her whole body grew motionless, her eyes wide open, fixed, and completely vacant; she had no knowledge of what was passing around her. The attack frequently came upon her whilst she was playing the piano, and she continued with perfect precision up to a certain point. Once the fit seized her just as she commenced playing a piece, that was new to her. During the paroxysm she continued the piece and repeated it perfectly five or six times over; when she recovered, it was impossible for her to perform it without having the music before her.'³⁵

Case 4. The patient was a young servant-girl subject to attacks of somnolency, which came on suddenly during the day, and from which at first she could be roused by shaking her, or taking her out into the fresh air. Soon she began to talk continually during the attacks, contemplating as in a dream the objects which appeared to pass before her; and she then no longer heard a word that was addressed to her. She once repeated distinctly the baptismal service of the Church of England, terminating with an extempore prayer. In her later attacks she began to hear what was said to her, and to reply very sensibly, although the influence of her hallucinations could be perceived; she also became capable of performing her usual duties during the fit; once she laid the cloth quite rightly, and several times she dressed herself, and the children as well, *with her eyes shut*. Later on a remarkable circumstance was noticed, that during the paroxysm she remembered perfectly well what had taken place in the former attacks, although she had not the least recollection of it in her lucid intervals. One day, during an attack, she was taken to church, where she behaved with perfect propriety, and evidently listened attentively to the preacher, being at one time so much affected as to shed tears. In the interval between the paroxysm and the next, she gave an exact account of the sermon, noting in particular the part by which she had been so much impressed. In one of her attacks she read distinctly a passage from a book which was presented to her, and she frequently sang hymns and songs. This, as the doctor affirmed, she was unable to do when awake. The affection lasted six months, and ceased in consequence of a particular change in her constitution.³⁶

The radical differences between these cases and the ecstasy of

³⁵ Abercrombie, *Inquiries concerning the Intellectual Powers and the Investigation of true Somnambulism*, London, 1841, p. 308.

³⁶ Abercrombie, p. 316.

Louise Lateau are so clearly evident, that the reader will certainly not expect me to make any observations on the subject.

XV.

Some persons have endeavoured, as we have already remarked, to account for the extraordinary phenomena observed in Louise Lateau by magnetism. To this supposition there was, however, one objection, most embarrassing from its simplicity: magnetism necessarily supposes a magnetiser. Now Louise is most frequently absolutely alone when the ecstasy begins. The advocates of magnetism did not draw back before even this difficulty: they asserted the possibility of magnetising from a distance, and suggested that the magnetiser of Louise Lateau might send her to sleep from any place whatever, from the fields, from the presbytery, from I know not where. It is not therefore quite unnecessary to prove that *magnetising from a distance* is a pure chimera. In order to demonstrate this fact, I will confine myself to experiments unquestionably made under conditions quite irreproachable.

The Academical Commission appointed in 1784 by the French Government proceeded as follows in order to elucidate the question of magnetisation from a distance:

‘The experiment took place at Passy. A woman, a subject brought by the magnetiser Deslon and described as very sensitive, was brought before the commissioners. They placed a bandage upon her eyes, and made her believe that Deslon had come to magnetise her. Strict silence was requested; three commissioners were present: one to interrogate, another to write, the third to represent Deslon. Then addressing Deslon, as if present, they begged him to commence, but in reality the woman was not magnetised. The three commissioners remained quiet, simply observing what took place. At the end of three minutes the patient began to feel a nervous shudder; then she felt in succession a pain at the back of her head, in her arms, and (to use her own expression) a pricking like the stinging of ants in her hands. She grew stiff, clapped her hands, rose from her seat, stamped with her feet; the crisis was clearly marked.

‘Two rooms, communicating by a door, were made ready for the next experiment. The door had been removed, and a frame covered only with double paper substituted. In one of these rooms a commissioner was seated to write down all that passed, and a lady, announced to be from the country, bringing some linen which she wished to have made up. Mademoiselle B——, a person who gained her living by plain needlework, had been sent for. She had been already

employed in the experiments at Passy, and her sensitiveness to magnetism was well known. When she arrived it was so arranged that there was only one vacant seat, which was placed as if in a niche in the recess formed by the doorway of the two rooms. The commissioners were in the adjoining room, and one of them, a medical man experienced in magnetising, and who had already been successful, was appointed to magnetise Mademoiselle B—— through the framework of paper. It is a principle in the theory of magnetism that this force passes through wooden doors, walls, &c. A frame of paper could therefore be no obstacle; moreover, Deslon had positively asserted the fact that magnetism passes through paper. So Mademoiselle B—— was magnetised, as if visible and in the presence of the magnetiser, for half an hour, at a distance of a foot and a half, and at opposite poles, according to all rules taught by Deslon, and which the commissioners had seen practised at his house. During all this time Mademoiselle B—— conversed gaily: when questioned respecting her health, she replied that she felt quite well. At Passy she gave way to this force after three minutes; here she bore the magnetism during thirty minutes without the least effect, because at Passy she thought she was being magnetised whilst here she was not aware of the fact. It is evident that imagination alone will produce all the effects attributed to magnetism, and when the imagination does not act the latter no longer takes effect. To this experiment it might have been objected that Mademoiselle B—— was in unfavourable dispositions at this time, and less sensitive to magnetism. The commissioners foresaw the objection, and made the following trial in consequence. Immediately after the attempt to magnetise through the door, the same medical commissioner went into the other room, and easily persuaded Mademoiselle B—— to let herself be magnetised. Then he began to operate on her, being careful to stand, as in the preceding experiment, at a distance of a foot and a half, and only to use gestures and movements of the forefinger and of the iron rod. The only difference between these two experiments is, that in the first he magnetised from opposite poles according to the rules, while in the second he magnetised from direct poles and the wrong way. By acting as he did, according to the theories of magnetism, he ought to have produced no effect. Nevertheless, after three minutes, Mademoiselle B—— experienced a feeling of uneasiness and stifling; this was succeeded by a broken hiccough, chattering of the teeth, choking at the throat, and, lastly, by a violent headache; she moved about uneasily on her chair, complaining of a pain in her side; sometimes she stamped hurriedly with her foot on the floor, then she stretched her arms behind her back, twisting them together as at Passy; in short, the convulsive crisis was complete and perfectly characterised.

All these symptoms appeared within twelve minutes, whilst the same treatment employed for thirty minutes had taken no effect upon her. There is nothing in this but imagination, and it is to imagination alone that these effects are to be attributed.³⁷

The other experiments tried by the Commission of 1784 constantly produced the same results as those just related.

M. Morin, formerly a partisan of magnetism, has also made equally conclusive experiments.

‘Most frequently,’ says he, ‘in assemblies devoted to magnetic experiments, there is a magnetiser famed for his power, and accompanied by a subject who is considered very remarkable. I then make one or other of these two trials. I take the magnetiser into another room, saying aloud that I am going to arrange with him about the order of the experiments. A few minutes after we have gone out, a person who has a secret understanding with me comes and tells the subject that his magnetiser is going to act upon him from the next room; and that others will calculate, watch in hand, how long it takes to produce the effect. After a few minutes, sometimes even only a few seconds, the subject passes to the state of somnambulism, and presents all its features, such as insensibility, isolation, convulsion of the eye-ball, &c. And yet neither the magnetiser nor any one else has acted magnetically; to produce this phenomenon it sufficed for the subject to imagine he was being magnetised. Imagination therefore did everything. At another time I announce that we are waiting to commence the experiments until some one else has arrived; and then, under some pretext, I lead the magnetiser into the adjoining room, and there invite him to magnetise his subject. He strives with all his might, gesticulating as usual, and endeavouring to send torrents of fluid in the direction of the subject; but the latter, persuaded that the moment has not yet arrived, experiences absolutely nothing. This proves that when imagination is lacking, the magnetic action is powerless; this action is therefore imaginary.

‘Every one can reiterate this double test; the result of it is always the same.

‘Having presided for two years over the private meetings of the Société du Mesmérisme, I often drew the attention of its members to the necessity of elucidating this grave question, and I called upon those of my colleagues who were able to do it to present us with magnetic effects in the production of which imagination should have no share. Several members undertook to satisfy us, and affirmed that it was a daily occurrence for them to magnetise effectually sub-

³⁷ Extract from the Report of Bailly.

jects who had no suspicion of it. To verify the facts, commissions were appointed composed of very zealous partisans of magnetism, who earnestly desired the success of the attempts; it cannot therefore be alleged of them, as was done of the Academical Commissions, that they were unfavourably disposed, and determined not to see. Yet all these attempts ended in disappointments. To give some idea of the precautions that were taken, I will relate how we proceeded in one of these cases.

‘M. N—— assured us that from his house, situated in the Rue des Vieux-Augustins, he every evening magnetised his daughter-in-law, and placed her in a state of somnambulism; she living on the Boulevard de l'Hôpital. This young person, when in a state of somnambulism, confirmed this declaration, and added that each evening, when she was in that state, she saw the fluid coming to her from M. N——, passing in a straight line through the buildings, and traversing in five minutes the space between the two dwellings (of course this speed is far less than that of light and electricity). The commission was divided into two sections; which, on the same day and at the same hour, went, one to the house of M. N—— and the other to the young lady's house. It had been agreed previously that the members of the first section should choose any moment they pleased for inviting the magnetiser to send the subject to sleep, and afterwards for awakening her; and that those of the second should simply note what passed at the abode of the young lady. It would have been desirable to leave the latter in ignorance of the proposed experiment, but the commissioners were obliged to inform her of the fact, in order to account for their visit; but neither she nor the commissioners who were with her knew at what moment the magnetisation would take place. She knew she was going to be magnetised, and that was all. She joined in the conversation with apparent freedom of mind. After a certain time she manifested the premonitory symptoms of magnetic sleep, and then she slept. Upon being interrogated whilst in this state, she declared that she could see what was passing at the house of M. N——, and that she plainly distinguished the current which came from him to her. The commissioners remained neutral and did nothing. She awoke of her own accord. An hour afterwards she had a second attack of somnambulism, and then she awoke again. An exact note was taken of the beginning and end of each sleep. In the mean time, upon the request of the other section, M. N—— had once only magnetised and then unmagnetised [her] to awaken her; but both these operations had taken place precisely in the interval between the two sleeps of the young lady. She had gone to sleep and awoke twice without being magnetised; and when really magnetised, she

felt nothing of it. Here again it is evident that imagination caused everything. Each evening the young lady, knowing she is magnetised, falls into somnambulism. Upon the visit of the commissioners, she knew she was going to be magnetised; but being unable to guess the exact moment, she went to sleep at hazard. Had there been a difference of only a few minutes, it would have been attributed to the passage of the fluid. We therefore recommend all who wish to try similar experiments to set about them in such a manner that the subject may not even know he is the object of attention.

‘I have known numberless trials of this kind, and all have given equally negative results.’³⁸

It must be remarked that the experiments I have just quoted prove nothing against the reality of most phenomena of magnetism; they simply demonstrate that it is impossible to magnetise from a distance, out of sight of the subject; this is the thesis we have advanced. Beyond this we are perhaps authorised to conclude from the facts recorded by the Academical Commission and by M. Morin that imagination plays a principal part in the origin of magnetic phenomena; but from the cause of these phenomena being known, it would be quite illogical to conclude that the phenomena do not exist.

After demonstrating the reality of some magnetic phenomena, M. Morin is careful to caution his readers against the deceptions too often practised by magnetisers. He says, ‘M. Gandon, in his pamphlet entitled *Second Sight*, explains in detail all these ingenious stratagems. He relates very humorously how, having performed some experiments of *second sight* at the Société du Mesmérisme, during which he had unceasingly declared that they were mere tricks, he obtained the most brilliant success. The magnetisers persisted in maintaining that he aroused transcendent lucidity, and that he was a magnetiser of the first order; they were not convinced until he had shown them the tricks of the art.

‘It is well known now that this is only an exercise of skill, and requires no transcendent faculty. And yet numbers of somnambulist séances are nothing more. Each time that the magnetiser is aware what the somnambulist ought to say or do, he can make it known to her by conventional language, consisting of a few apparently insignificant words, by the pressure of her hand or some other touch, by the manner of walking, of placing a chair, &c. You write on a little note the action you wish the somnambulist to perform, or a posture you wish her to take; this note is given to the magnetiser, who reads it; then, without speaking a single word, takes the som-

³⁸ Morin, *Du Magnétisme et des Sciences occultes*, Paris, 1860, p. 35.

nambulist by the hand and leads her to you, when she immediately performs what you have requested. The note is shown to the assembly, and every one applauds. It is a mere trick. The touch of the hand sufficed to inform the somnambulist of the part she was to act. A magnetiser, who enjoyed a certain reputation in Paris, owned to one of the most distinguished members of the Philanthropic Magnetic Society that he had a hundred and eighty different manners of touching the somnambulist, and that by the aid of these signs he could make her perform anything that is usually asked for. When reproached for his dishonesty, he replied that lucidity³⁹ being too variable, it became necessary to make up for it by a little skill.

‘Some magnetisers have succeeded in making themselves understood by their somnambulists without the assistance of either words or visible signs. We will quote two instances of this: A conjuror, who was giving a performance of *second sight*, professed also to have the power of transmitting sensations. The pretended somnambulist held in her hand a glass of water, and it was announced that when she drank it she would taste, not water, but any beverage chosen by one of the spectators. On a piece of paper was written by the spectator the name of the beverage he had chosen. The operator, having recommended strict silence, placed himself behind the somnambulist, without touching her, without saying a single word; he magnetised silently by means of his outstretched arms, which she could not see; he appeared excited by an energetic exercise of the will, and was breathless. The somnambulist drank; then, after a few seconds apparently spent in tasting, she declared that she had just drunk the liquor you had designated. The sound of the operator's respiration formed the conventional language by means of which he indicated to her each time the beverage she was to name.

‘One of my friends introduced to me a subject whom he pronounced gifted with singular faculties. The subject was shown into an adjoining room; a card was drawn at hazard and presented to the operator. He looked at it, laid it upon a sheet of white paper, magnetised it (at least his gestures implied so), and assured us that this sufficed to leave upon the paper an impress visible for the subject. The cards were put away, the operator seated himself in an arm-chair, and remained motionless, silent, and even with his eyes shut, to prevent all suspicion of connivance. Then, as had been previously arranged, the subject, who remained awake, was introduced; he approached the table on which the paper was lying, looked fixedly at it for a few moments, smelt it, and announced first

³⁹ *Second sight*.

the colour of the card and then what card it was. Every one exclaimed that it was most wonderful. After the operator had enjoyed our applause for some minutes, he told us it was simply a trick, in which neither magnetism nor second sight had any part. It had been agreed between him and his pretended subject that the latter, on entering the room, should glance at him, and that the various manners of placing his legs, near the legs of the chair or far from them, and the position of his hands on his knees, should constitute a language by the aid of which the fifty-two cards could be designated.⁴⁰

XVI.

The phenomenon of *clairvoyance* has given rise to many illusions and to much jugglery.

In 1837 Dr. Burdin proposed to the Academy of Medicine of Paris to found at his own expense a prize of three thousand francs, to be given as a premium to any one who could furnish proofs of the fact that it is possible to read without the assistance of the eyes, of light, or of touch. The Academy accepted the proposal, and a commission of seven members, chosen from that body, was appointed to superintend the trials. At the expiration of two years, the term fixed by the Academy, only three competitors presented themselves in earnest. The first, Dr. Pigeaire, came from Montpellier with his daughter, a somnambulist eleven years of age, whose lucidity was highly extolled. He had written: 'Make my daughter blind for a moment, and still she will read.' In spite of this assurance he could not agree with the commission concerning the manner of keeping the light from the eyes of the somnambulist. The conditions offered by the commissioners were, however, most reasonable; they proposed that she should be blindfolded or not, at her own choice; that simply a sheet of paper should be interposed between her eyes and the object to be discerned; that she might also, if she chose, make use of her fingers, but with a plate of glass between them and the book in which she was to read; finally, they declared that they would be content with a bandage of any description without the interposition of a sheet of paper, but on condition that the objects to be discerned should be placed at any distance M. Pigeaire wished, and in such a direction that, in case the bandage should slip, nothing could be seen from beneath it. 'Thus,' said they, 'instead of placing the objects obliquely below, they should be placed directly opposite;

⁴⁰ Morin, p. 112.

that is to say, in a direction perpendicular to the surface of the bandage.' M. Pigeaire having refused these conditions, the trials did not take place.⁴¹

A physician of Bordeaux, named Hublier, had also announced to the Academy that he would accept the programme of M. Burdin for one of his somnambulists, and he arrived in Paris with her. But in a preparatory trial the pretended clairvoyante was caught in a flagrant act of fraud; she professed to have the power of reading in a closed book, but she demanded that she should be left alone for a short time in the presence of the book she was to read. Directly she was unobserved she copied in pencil on a small piece of paper the passages she was to read a few moments later. M. Hublier acknowledged honestly that he had been the dupe of his subject, and she did not appear before the Academical Commission.⁴²

Finally, a third magnetiser, M. Teste, was equally unlucky. M. Teste boasted that he had a somnambulist who could read writing or printing shut up in a box. This was all that was required. With such clearly-expressed conditions it became unnecessary either to debate or delay, and the magnetiser and the Commission of the Academy were quickly able to arrange an interview. Its result here follows; it will be the last we shall give of this history, which is nearly ended.

The *Bulletin de l'Académie de Médecine* reports as follows the interview of the Commission with M. Teste's somnambulist:

'At a quarter before seven,' says the reporter (M. Double), 'the commission, composed of Messrs. Husson, Louis, Chomel, Gérardin, Dubois, and Double, assembled in the saloon of Doctor Teste, who received them with the greatest politeness. M. Teste showed us at once, upon a round table placed in the middle of the saloon, a paste-board box and several fragments of writing and of printing.

⁴¹ Morin, p. 138.

⁴² Hublier confesses his deception in the following letter, curious for its honesty and its utter amazement, if the expression may be used. It was addressed to Dr. Frappart, who had discovered the fraud practised by the pretended somnambulist:

'My sincerely honoured confrère,—I am confounded, hurt, stunned by all you showed me this morning. Four years of craft! What audacious perseverance! O, Mdle. Emélie is a clever woman; but you are a clever man too; in four days you unmasked her. I thank you and congratulate you as well.

'I am not going to ask you to keep this secret, or to spare me in any way; far from it, since, as you yourself said, truth must have its martyrs and victims before its triumph. Yet I scarcely know whether I any longer believe in anything; I need time to recollect myself.—Your devoted confrère,

HUBLIER, D.M.P.'

'The president of the commission announced that, in accordance with the invitation he had received in the name of M. Teste himself, he had provided pasteboard and wooden boxes of different sizes, each containing a fragment of printing in a clear type, and that he wished one of these boxes to be used. Two of these boxes, of about the size of four inches, each contained a printed page of the same size in pica letters (*caractères cicéro*). These two were laid aside as too large. A third very small pasteboard box had in it one single line and five or six words, about twenty-five letters, printed in small capitals. M. Teste chose that one. Several members of the commission rejected it as too small, and besides not containing the required pica type. M. Teste and the commission unanimously adopted an oblong pasteboard box, narrow and long, being about four inches and a half long and an inch wide. Some printing, in pica type, was placed flat and loose in the box, which was secured by two small bands of paper sealed at each end.

'M. Teste then brought in the somnambulist. She was a young woman, dark, and with pleasing features and general appearance. He placed her on a chair in one corner of the room, the members of the commission being seated at a short distance from her, and in a position from whence they could observe all her movements. M. Teste magnetised her with about twenty passes, and pronouncing her in a state of somnambulism, handed to her the box that had been selected, and which he received direct from the hands of the president of the commission. The latter pointed out, at the magnetiser's request, the direction of the lines and letters on the fragment of paper contained within the box. Shortly afterwards M. Teste asked the somnambulist if she could read in the interior of the box; she replied affirmatively. He asked her how soon she thought she could read it; she answered, "In ten minutes;" and this with an assurance and conviction that were truly startling.

'She continued to look intently at the box, moving and turning it in her hands. In these movements she tore one of the slips of paper sealed round the box. A remark was made on the subject, and nothing more of the kind occurred.

'The embarrassment of the somnambulist increased visibly; she exhausted herself with fruitless efforts, which, in appearance at least, were most fatiguing. The length of the lines (it was poetry) did not fill the entire length of the box; there was a considerable space of blank paper; and it was upon this unoccupied space that the attention and the fingers of the somnambulist seemed especially to rest, as though she wished to read at a place where there were no letters. She had announced that she could read it in ten minutes, but half an hour, an hour even, passed in this manner. The magnetiser asked

the somnambulist how many lines there were in the box; she said *two*. He pressed her to read, and she said she saw the word *nous*, and soon afterwards the word *sommes*: *nous sommes*. Finally, the somnambulist having owned that she could read nothing more, the box was taken from her hands; the magnetiser caused the magnetic sleep to cease, and the somnambulist immediately quitted the saloon.

'The box was at once opened in the presence of M. Teste; the fragment of printed paper enclosed within it contained the following six lines, taken from the speech of Marius, imitated from Sallust, in the *Guerre de Jugurtha*, by Viscount Leprévost d'Iray, a member of the Institute, the Academy of Inscriptions and Belles-Lettres:

"Encore un mot, Romains, tout est mûr pour la gloire.
Ma dernière parole est un cri de victoire;
Nos succès fussent-ils différents ou douteux,
S'arrêter est fatal, reculer est honteux.
Choisissez: Rome libre ou la patrie esclave.
La mort, effroi du lâche, est la palme du brave."

'The failure, it is evident, could scarcely have been more complete. The somnambulist had seen two lines where there were six; she had read the two words, *nous sommes*, and in the whole of the six lines neither *nous* nor *sommes* can be found.⁴³

What is known by the name of *spirit-rapping* is in numberless cases nothing but a more or less skilful deception. In the report of the meetings of the Academy of Sciences in Paris (18th April 1850) may be seen the physiological explanation of certain noises which dexterous performers produce by sleight-of-hand in their joints or muscular grooves, and which they ascribe to spirit-rapping.

XVII.

It is said that the Indian Fakirs bring on attacks of catalepsy by looking at the end of their nose for a quarter of an hour. At the expiration of this time a bluish flame appears at the tip of their nose, and catalepsy follows almost immediately. It is evidently owing to nervous sleep that the Indian Fakirs can remain for a considerable time in the extraordinary attitudes and postures which attract the admiration and respect of the multitude.

Were we to question travellers in the East, we should hear of numerous practices in use amongst the people of those countries for

⁴³ Figuier, vol. iii. p. 834, &c.

producing enchantment or fascination ; all which might be explained by the phenomena of hypnotism. Let us consider one or two instances of this.

In a letter addressed from Cairo, in the month of February 1860, to the editor of the *Gazette Médicale de Paris*, by Dr. Rossi, physician to the Prince Halem Pacha, precise details are given concerning the methods employed by the Egyptian sorcerers to produce sleep accompanied by insensibility.

‘In this land of traditions,’ writes Dr. Rossi, ‘in this country, where what was done forty centuries ago is still done at the present day, there exists a class of persons who gain their living by the profession of *Mandeb*.

‘The effects produced by them, hitherto spoken of with contempt as charlatanism, are the same as those lately published by M. Braid. Still further, as you had foreseen by scientific induction, hypnotism in their hands is merely the first link of the chain which ends by the phenomena of magnetic somnambulism. They proceed in the following manner. They generally make use of a perfectly white earthenware plate. This is the luminous object of M. Braid. In the centre of this plate they draw, with pen and ink, two triangles crossing each other, and fill up the space occupied by this geometrical figure with cabalistic words ; this is probably in order to concentrate the sight on a limited point. Then, to increase the brightness of the surface of the plate, they pour a little oil upon it.

‘Generally speaking, they choose a young subject for their experiments, and make him fix his eyes on the centre of the double triangle. Four or five minutes after, the following effects are produced. The subject begins to see a black spot in the middle of the plate ; some minutes later this black spot grows larger, changes its shape, and transforms itself into different apparitions, which float before the subject. Having arrived at this point of hallucination, the subject frequently acquires a somnambulistie lucidity as extraordinary as that of those who are magnetised.

‘There are, however, some of these *cheks* (those who produce these phenomena are venerated as *cheks*) who, more simple in their preparations, without having recourse to geometrical figures and cabalistic words, cause hypnotism and somnambulism quite simply in M. Braid’s manner, by making the subject fix his eyes upon a crystal ball ; and as they have no Charrière to make some pretty apparatus, they use one of those balls which in many houses contain oil and answer the purpose of lamps.’

A member of the Institute, Count de Laborde, bought from an Arab sorcerer at Cairo the secret of *apparitions in the hollow of the hand*. Children, taken at hazard, ‘see in the hollow of their

hand, with as much ease as if through a skylight, men moving, appearing and disappearing.⁴⁴

The means of fascination employed by the sorcerers of Egypt differ but little from those which are used in French Africa⁴⁵ by the Arab *gzanes*, and by the marabouts of certain religious sects on the frontiers of Morocco. In a letter written from Algiers, and published in the *Union Médicale* of 2d January 1860, Dr. de Pietra Santa gave the following description of two methods of fascination which have an evident connection with hypnotism:

‘The first,’ says M. de Pietra Santa, ‘forms part of the baggage of all Arab *gzanes*, gipsies, sorceresses, or fortune-tellers.

‘The second is used by the marabouts of certain religious sects on the frontiers of Morocco.’

When one wishes to strike the imagination of the multitude, it is absolutely necessary to find phenomena which are both comprehensible for all and that each one can verify instantly. Amongst such there is not one more evident than sleep; it is therefore important for the *gzane*, in order to prove in an undeniable manner her moral power and supernatural influence, that she should be able to send to sleep, at a given moment, the person who has recourse to her occult science. She employs these means:

‘Upon the palm of the hand she describes, with some blackish colouring matter, a circle, in the centre of which an equally black spot is marked.

‘After looking fixedly at this circle for a few minutes the eyes grow heavy, they blink, and the sight grows confused; soon the heaviness is succeeded by sleep, and sleep by a sort of insensibility, of which she profits to exercise her manœuvres more securely.

‘I give you the simple fact, without commentaries; without having the pretension to determine its importance; and I pass on to the second.

‘Upon a table, covered with a white cloth, a bottle usually filled with water is placed, behind which a small lamp is burning. At the distance of a few steps the *subject* is comfortably seated on a chair, and requested to look at the bright point placed before him. At the end of a few minutes the person finds his eyelids grow heavy, then they gradually sink, and sleep comes on. With a nervous temperament, palpitation of the heart and headache also manifest themselves.

‘In order to give an odour of the supernatural to these pheno-

⁴⁴ *Revue des Deux Mondes*, August 1840. By using the word *lucarne*, skylight, we may presume that the children hold up their little hand between their eyes and the sky.—TRANSLATOR.

⁴⁵ *Algiers*.—TRANSLATOR.

mena, the Morocco marabout has a certain quantity of benzoin burnt behind the table, and whilst the vapour spreads itself through the room, the person undergoing the process falls into a complete state of anæsthesia.'

It is evident that these different processes of fascination are quite similar to those published by Mr. Braid, and that the condition in which the Arab sorcerers place their patients is a true state of hypnotism.

XVIII.

The patient in the following case, reported by M. Mesnet, was a hysterical woman. Her illness lasted seven months. It commenced with violent hysterical fits, the number of which sometimes reached forty-eight in twenty-four hours. Soon the phenomena of catalepsy (muscular rigidity, retaining the postures given to the limbs or trunk) appeared after the hysterical fit. They lasted from fifteen to twenty minutes. To this double nervous affection attacks of somnambulism were added, during which the patient was governed by one single idea, the temptation to suicide, which she unceasingly sought to realise. The somnambulist being full of her sinister pre-occupations, no impression could be made upon her, either by the presence of persons placed opposite to her in the lightest part of the room, or by the sound of voices, or by the noise of a spoon struck violently on the bottom of an instrument close to her ear.⁴⁶

Doctor Masarde reports a case of hysteria in which the fits reappeared on four consecutive days at about five o'clock in the morning, and disappeared under the action of sulphate of quinine.

He quotes another case, where the attacks returned every fifth day.⁴⁷

Doctor Dassit relates the account of a young girl who, during ten or twelve years, was affected with ordinary hysterical fits; at the expiration of this time the attacks assumed a periodical form. Every day at about three o'clock a clearly-developed hysterical fit came on, succeeded by a profound sleep, with suspension of sensibility, and lasting three or four hours.⁴⁸

Doctor Mangin reported, in 1850, his observations of a young person, nineteen years old, whom he had attended for an affection which he designated by the title of ecstasy. During her attack she lay upon her back, sleeping calmly, her limbs outstretched. The insensibility of the skin was complete. This state lasted two days

⁴⁶ *Archives gén. de Méd.*, No. for February 1860.

⁴⁷ *Ann. de Méd. belge et étrangère*, t. iv. p. 24.

⁴⁸ *Bullet. de Thérapeutique*, August 1841.

without any change. Suddenly she started up, knelt upon her bed, opened her eyes, and raising them to heaven, began to speak in exalted terms of God, of the angels, and of the joys of Paradise. After remaining thus kneeling for thirteen hours, she sank down and awoke. She fell into the same state on several different occasions; first, with an interval of fifteen days, and then of eight days.

The author of this observation left it unfinished.⁴⁹ I suspected that this was a case of hysteria, with a complication of ecstatic phenomena.⁵⁰ I made inquiries at the spot; and this is the information I obtained:

The girl was deeply attached to a young man whose family were in good circumstances. A project of marriage, which appeared perfectly settled, was abruptly broken off, and this caused her a severe moral shock.

It was after this grievous deception that hysterical attacks appeared, soon afterwards complicated by hallucinations.

These phenomena, which excited considerable attention in the neighbourhood, were never considered by those who observed them with any care, and especially by the clergy, as bordering in any degree on the supernatural.

I attended a young person, suffering from hysteria, who presented most remarkable ecstatic symptoms. During her attacks, which occurred at irregular intervals, she was motionless in her bed; her eyes raised towards heaven and fixed, she appeared insensible to everything around her. When subjected to the action of magnetism, she presented strange phenomena of lucidity; she discriminated the diseases of the persons with whom she was placed in connection, dictating very detailed prescriptions. She described the interior of her own organs, into which her eye penetrated as though they had been of crystal.⁵¹

Different signs, which it would be tedious, and moreover useless, to relate here, had led me to believe that this apparatus of extraordinary phenomena was hiding a very skilfully-managed deception; but the convictions of the persons about her were so strong that I required a proof capable of opening the most prejudiced eyes. I

⁴⁹ *Gazette médic. de Paris*, No. for February 1852.

⁵⁰ See *L'Etude de l'Hystérie à la Forme extatique*, p. 235.

⁵¹ In the *Edinburgh Review*, No. 278, for October 1872, in an article 'On the Progress of Surgery and Medicine,' we read that 'a new instrument has only just been discovered (the diaphonoscope) by which the internal organs are made visible, through the walls of the abdomen, by means of very powerful lights, which render the body to a certain degree transparent, and the outlines of the abdominal viscera are thereby mapped out to the eye.'—TRANSLATOR.

watched her. The clairvoyante announced one day that she had a tænia⁵² in her intestines, and she gave a detailed description of it. She was caught there. We possess sure means of bringing this parasite to light; this would be an undeniable testimony. The young girl did not shrink from the test; a few days later she announced that the parasitic animal had been expelled, and she presented a thread drawn out of some material of small white and red check. These two colours were reproduced naturally in regular dots upon the thread, and gave it a resemblance—a very slight one, however—to the joints of the tænia. The comedy ended there.

Other observations of extraordinary nervous affections may also be found in *Les Miscellanées, les Ephémérides et les Actes de l'Académie des Curieux de la Nature*, 54 vols. (see Books of Reference, p. 219); in Hofman, *Opera medica*, vol. iii.; in Arnold, *Observations of the Nature, Kinds, Causes, and Prevention of Insanity*, London, 1806, 2 vols. in 8vo; in *L'Encyclographie des Sciences médicales*, tomes xi. xxii. and xxiii.; and especially in the collection of the *Annales médico-psychologiques*, which now numbers 44 vols. in 8vo (see Books of Reference, p. 219).

⁵² Common tape-worm.

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CASES of hæmorrhage presenting some traces of resemblance to stigmatic bleeding, and nervous diseases offering some analogy with the state of ecstasy, are scattered up and down through a multitude of medical works. There is need, therefore, of long and minute researches in such treatises to find them. I will indicate, for the sake of those who wish to recommence this line of study, the principal sources whence they may collect facts of this nature. It is worth while to remark, that these researches are especially difficult and wearisome, in every century preceding our own. About the middle of the last century they began to publish journals, reviews, and dictionaries of medicine. These publications show a marked preference for recording extraordinary facts. The observation of cases of hæmorrhages with unusual symptoms, or of strange nervous affections, were not likely then to escape them. This circumstance explains how, in examining with some care medical dictionaries and periodicals, I have been able to keep within due limits the researches to be made amidst the innumerable productions of modern medical science.

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